CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS, 1952

MONDAY, JULY 30, 1951

UNITED STATES SENATE,
SUBCOMMITTEE ON THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10:30 a. m., pursuant to recess, in room F–39, the Capitol, Hon. Allen J. Ellender presiding.

Present: Senators McKellar, Hayden, Ellender, McClellan, Robertson, Young, Cordon, Thye, Ecton, Holland, and Stennis.

CORPS OF ENGINEERS

FLOOD-CONTROL PROGRAM

STATEMENT OF HON. EDWARD MARTIN, A UNITED STATES SENATOR FROM THE STATE OF PENNSYLVANIA

NEWBERRY SECTION, WILLIAMSPORT FLOOD-CONTROL PROJECT, PENNSYLVANIA

Senator ELLENDER. The subcommittee will come to order.

Our first witness this morning is Senator Martin of Pennsylvania.

Senator MARTIN. Mr. Chairman and gentlemen of the committee, Senator Duff is here and Congressman Bush from the district in which Williamsport is located. There would also be a very large delegation of business and professional people here, but I told them I did not think that was necessary. I did not want to take your time. So, I have a statement here which I will read; and, if you have any questions to ask me at any time, do not hesitate to do so, although Congressman Bush and Senator Duff can both answer just as well as I can.

As you know, I was Governor of Pennsylvania at one time and Senator Duff succeeded me, and we are very familiar with all of these projects, and we have the Congressman from one of the districts; so, any questions you may want to ask do not hesitate to do so.

Senator CORDON. May I interrupt you to ask if we can identify the items with respect to this list that has been furnished by the Corps of Engineers? As the Senator notes the project, will you give the page?

General CHORPENING. This is on page 147, sir.

Senator MARTIN. I greatly appreciate the privilege of appearing before your committee in support of two projects which I feel are of vital importance to the welfare of the people of Pennsylvania.

RESTORATION REQUESTED

First, I respectfully request the restoration of the budget item of $775,000 for the completion of the Newberry section of the Williamsport flood-control project.

TOTAL ESTIMATED COST

This is the last construction unit in an over-all project which has a total estimated cost of $15,000,000. It was authorized in 1936 and started in 1940.

The Williamsport area is made up of Williamsport, South Williamsport, and Newberry. The people of the area are deeply grateful for the protection they have been given and the progress that has been made to prevent the tremendous loss and suffering they have experienced from disastrous floods in the past.

FLOOD DAMAGE

Since 1936, when the Williamsport area suffered flood damage of 10½ million dollars, three floods have inundated the area, the worst being that of May 1946, which resulted in damage of nearly 9 million dollars.

These two floods alone accounted for damage greater than the total cost of the project.

1952 BUDGET ESTIMATE

The budget request of $775,000 has the complete approval of the Army engineers. It is for that portion of the project which will give the same protection to the Newberry section as is now afforded to Williamsport and South Williamsport.

HOUSE ACTION

It was deleted by the House Appropriations Committee on the ground that this is a new project. The people of Williamsport are convinced that this was the result of a misunderstanding of the situation. They fail to recognize any basis for classifying the Newberry portion of the Williamsport work as a new project.

In this view they are supported by the Army engineers whom I have consulted and who have assured me that from the very beginning they have regarded the Newberry area as a part of the over-all Williamsport flood-control program.

In further support of that position, I quote from a letter dated June 15, 1951, addressed to Congressman Alvin R. Bush, representing the Fifteenth District of Pennsylvania, and signed by Lt. Col. Wright Hiatt for Gen. C. H. Chorpening, Assistant Chief of Engineers for Civil Works.

In reply to an inquiry from Congressman Bush as to whether the Newberry area is considered to be a separate project or whether it is to be considered a continuation of the authorized Williamsport flood-control program, Colonel Hiatt wrote as follows:

> The Corps of Engineers considers the Williamsport project to be a single large job, and the west-end units in the Newberry area are not considered as a separate project.

Many of the industrial facilities which affect the welfare of the entire Williamsport area are located west of Lycoming Creek and are subject to flooding. Workers in the Williamsport proper area reside in the area subject to floods on the west side of Lycoming Creek, and many industrial operations within the city proper would be affected by flooding of the Newberry area.

A severe flood in the Newberry area would to a large extent tie up the railroad shipping operations from Williamsport, since the railroad yards are located in Newberry.

In view of these factors and the authorization of the Williamsport project as a single project by the Congress, it is the view of this office that the Newberry area should be constructed as a continuation of the flood-protection project for Williamsport, which is now well under way.

That is the end of the quotation from Colonel Hiatt's letter.

FLOOD DAMAGE IN NEWBERRY SECTION

In the Newberry section, which lies completely outside the protected area, there are over 3,000 homes occupied by approximately 9,000 people. It has 11 industrial plants employing over 2,000 workers.

These industries have an annual production rate of $30,000,000, much of it in defense material.

Under conditions as they presently exist, this area and its people are exposed to greater danger than they were prior to the beginning of the program.

The system of dikes already completed has created an extremely hazardous situation by which high floodwaters are diverted into the unprotected area and cause greater damage than heretofore.

This danger was recognized by the civic leaders and the citizens of Newberry when the flood-control project for the Williamsport area was first discussed.

Before they voted to approve a bond issue to meet the local costs of the project, amounting to $1,300,000, the Newberry people sought assurance that they would not be subjected to the hazards of an incompleted job.

They obtained from the Corps of Engineers the public statement that the dikes would not be sealed in until all could be sealed at the same time.

They relied upon that promise, but today they find themselves not only unprotected but actually facing increased danger.

That danger should be removed with the least possible delay. It can be removed by making available the sum of $775,000 as recommended by the Bureau of the Budget and approved by the Army engineers for the completion of this most vital unit in the over-all Williamsport program.

It is important to note that the work needed to complete the project in the Newberry section consists of earthen dikes, requiring little manpower and no critical materials.

With all the emphasis at my command, I appeal to this committee to restore the $775,000 appropriation in order to correct what the people of Williamsport and I personally regard as a grave injustice.

I would like to insert this: Williamsport has been subjected to floods over a long period of years. Williamsport at one time was the center of the lumber industry of Pennsylvania. When the lumber was exhausted in the eighties, there was a terrible flood which practically destroyed the whole city. The people of Williamsport were not

dismayed. They started to rebuild. They brought in other industries, and now it is the center of one of the finest industrial areas of Pennsylvania.

I want to bring that out because Williamsport has always helped itself. Without the great civic pride of its people there probably, with the exhaustion of the lumber, would not have been any city there, but it is now a fine prosperous community.

REQUEST FOR REMOVAL OF CULM FROM SCHUYLKILL RIVER, PA.

The second request for which I urge favorable consideration is the appropriation of the full budget recommendation of $1,900,000 for the removal of culm from the Schuylkill River from Norristown to the Fairmount Dam, Pa.

Senator CORDON. On what page is this?

Senator MCCLELLAN. While General Chorpening is looking for the page, I would like to ask a question. Have local areas made any contribution toward the improvement?

Senator MARTIN. Congressman Bush, how much have the local people contributed to this project in Williamsport?

Representative BUSH. About $1,300,000.

Chairman MCKELLAR. What was it for?

Representative BUSH. Their contribution was great enough to acquire all the lands that were needed to build these dikes.

Chairman MCKELLAR. Now, on what page is this?

General CHORPENING. What is on page 38, sir.

Senator MARTIN. This is a major undertaking in the stream-clearance program which I initiated while serving as Governor of Pennsylvania, and which was carried forward with great success by my successor in the Governor's office, the distinguished junior Senator from Pennsylvania, James H. Duff.

For many years the bed of the Schuylkill River has been receiving coal-silt deposits from coal-mining operations. These deposits not only filled the river but are pushed by floods into the navigable portions of the Schuylkill River and into the Delaware River, adding substantially to the cost of maintaining navigation in the Philadelphia Harbor.

In July 1946, Congress authorized cooperation with the Commonwealth of Pennsylvania for dredging the culm from the Schuylkill and the elimination of further discharge of mine and industrial wastes into into the river.

ACTION BY STATE

Pennsylvania agreed to remove all culm deposits above Norristown, estimated at 24 million tons. This has been completed at a cost to the State of $35,000,000.

Pennsylvania further agreed to prevent the further discharge of coal silt into the Schuylkill, and this part of the program has been carried out with complete success.

FEDERAL CONTRIBUTION

The Federal Government's commitment in this joint enterprise was to dredge the river from Norristown to the Fairmount Dam at an estimated cost of $12,574,000.

The Federal Government has spent $400,000 getting ready to carry out the agreement entered into with the Commonwealth of Pennsylvania. This sum was included in the 1950 appropriation act and was applied to the construction of disposal areas for the deposit of the dredged material.

The 1951 appropriation act, as passed by the Senate, included an item of $3,500,000 for continuation of the work, but this was eliminated and the dredging deferred.

The budget amount of $1,900,000 was recommended by the Corps of Engineers as the minimum amount needed from the standpoint of economy and efficiency.

EMERGENCY FUNDS EXPENDED

As an example of the added cost to the Federal Government by reason of delay, I call your attention to the fact that this spring it became necessary to spend $200,000 in an emergency project for dredging in the Philadelphia Harbor. This was caused by a flood which swept more than a million tons of culm over Fairmount Dam into the navigable portion of the Schuylkill, and seriously interfered with access to important industrial plants on the river.

The people of the Schuylkill Valley feel that the Federal Government should honor its agreement to proceed with this important work.

They placed full faith and confidence in the Government's promise that the Federal share of the project would commence when the State of Pennsylvania had completed 50 percent of its share.

Pennsylvania has lived up to its agreement. Its work has been completed. The Schuylkill River above Norristown has been cleared. The discharge of mine wastes into the river has been stopped completely.

RESTORATION REQUESTED

I respectfully submit that the recommendation of the Army engineers is amply justified and ask for the appropriation of the full budget amount of $1,900,000.

Chairman McKellar. May I interrupt you long enough to ask you this question? The Engineers have recommended $1,900,000. What did the budget do?

Senator Martin. The budget recommended the same amount.

Chairman McKellar. You have a budget estimate for $1,900,000?

Senator Martin. Yes, sir.

Chairman McKellar. The House left it out entirely?

Senator Martin. The House allowed $1,000,000.

Chairman McKellar. So, you are asking that the $900,000 be restored?

Senator Martin. Yes, sir. It seems to me that this is only fair. There was an agreement there between the Commonwealth of Pennsylvania and the Federal Government. One of the ways we were able to sell to the people of Pennsylvania the proposal for us to put up $35,000,000, which is a considerable sum for a State, was that the Federal Government would come in and do this work.

Chairman McKellar. General Chorpening, did you make an agreement to have this done under the circumstances stated?

General CHORPENING. Yes, sir; that is part of the recommendation upon which the Congress acted.

Senator CORDON. That agreement was in the nature of a participation arrangement at the time the project was approved; was it not?

General CHORPENING. Yes, sir; and that was made clear at the time we testified in connection with the authorization. That provision was included in the documents presented to the Congress at the time of authorization.

TOTAL EXPENDED TO DATE

Chairman MCKELLAR. How much has been expended to date?

General CHORPENING. $400,000 has been allotted to date.

Senator CORDON. Was it understood in your plans that your work would not go forward until 50 percent of the State participation had been done?

General CHORPENING. That is correct; yes, sir.

Senator MARTIN. That is my understanding.

Senator CORDON. That is a heavy local participation arrangement; is it not? It is far more than ordinarily required by local interests?

General CHORPENING. That is correct, sir.

STATE-FEDERAL CONTRIBUTIONS

Senator CORDON. What percentage of the total cost of the whole project is to be borne by the State?

Senator MARTIN. The total Federal cost is now estimated at $12,574,000, with $35,000,000 by the State.

Senator CORDON. That is only half of what the State has to do. The State has to put in $70,000,000 as against $12,000,000 by the Federal Government?

Senator DUFF. The $35,000,000 has already been expended by the State. The State's part of the project has been completed.

Senator MARTIN. It is complete. It was $35,000,000 and about $12,500,000 and the State's part of it has been done.

It is entirely successful. A lot of people doubted whether it would be successful, but the Engineers told us it would be successful, and now our end of it is completed and it is a success.

Senator CORDON. I thought you said half of the State's participation had been finished.

Senator MARTIN. No; the State's part of it is completed.

Senator ELLENDER. I have in the back of my head the recollection that when the State completed its part there remained quite a bit of recovery of coal that could be disposed of. Am I correct in that?

Senator DUFF. I will cover that in detail.

Senator MARTIN. Senator Duff will go into that in detail when he appears before you.

You see, for the information of the committee, this plan was worked out when I was Governor, but Senator Duff came along and did the actual work.

Senator ROBERTSON. Mr. Chairman, I notice from the House justification that they allowed enough to complete the top pool that had not been completed, and then they said they did not have disposal areas enough. So, they little more than doubled the allowance for

disposal areas which they said would make enough for the complete disposal areas, including the bottom pool. But, if we complete the next pool, it will take a little more than $900,000 if they complete it.

Senator MARTIN. As I understand from the Engineers, if we had the $1,900,000 it will do the work required, Senator Robertson, right at the present time.

Senator ROBERTSON. You will have to change the allocation for the disposal areas then. You will have to have more disposal areas when you reach the bottom pool.

Senator MARTIN. Senator, we did not want to duplicate the details on this project. The details can be given very much better by Senator Duff because he was Governor at that time.

LOCKS AND DAMS, UPPER MONONGAHELA RIVER

Let me say in conclusion that Pennsylvania is grateful for the inclusion in the present bill of $4,000,000 to continue construction of lock 2 at Pittsburgh and Morgantown lock and dam on the Monongahela River.

CONEMAUGH RIVER AND EAST BRANCH CLARION RIVER RESERVOIRS

We offer no objection to the reduction of the allocation for the Conemaugh River Reservoir from $10,000,000 to $8,400,000 or the cut in the allocation for the East Branch Clarion River Reservoir from $2,100,000 to $2,000,000.

We respectfully request approval by your committee of the amounts set forth in the House bill for these projects.

CONSTRUCTION SCHEDULE, WILLIAMSPORT FLOOD-CONTROL PROJECT

Senator YOUNG. General Chorpening, with respect to the Williamsport project, will this amount permit the project to be completed on schedule in 1954?

General CHORPENING. This amount requested would enable us to go forward with our program toward completion in 1954. This amount here by itself will not be sufficient for completion.

Chairman MCKELLAR. How much will it take to complete it, approximately?

General CHORPENING. A little over $5,000,000.

Senator ELLENDER. General, in that connection, I notice that the work was divided into sections 1, 2, and 3.

General CHORPENING. Yes, sir.

Senator ELLENDER. Is the work of one section dependent on the other?

General CHORPENING. It is all one project. Unless we complete the entire project we have not provided flood control for Williamsport.

Senator ELLENDER. Senator Martin has just pointed out that it is essential to complete this levee for which this amount is being asked. Do you agree?

General CHORPENING. That is correct, sir.

Senator MARTIN. If it were a larger project, I could take this committee up there and show you what will happen if it is not completed. I have been over it with Senator Duff. Of course, Congressman

Bush lives there. He has a business up there and he can go into the details.

I apologize for leaving before the others appear. I want you to know how much I appreciate your very courteous consideration.

Chairman McKellar. Thank you very much, Senator.

Senator Duff?

STATEMENT OF HON. JAMES H. DUFF, A UNITED STATES SENATOR FROM THE STATE OF PENNSYLVANIA

SCHUYLKILL RIVER DEVELOPMENT

Senator Duff. Mr. Chairman and gentlemen, to clarify one phase of this Schuylkill River improvement, the plan was first made for the desilting of the Schuylkill from the headwaters down to where it joins the Delaware at Philadelphia. The naval yard of the fourth district is located in Philadelphia right below where the Schuylkill enters the Delaware. This stream is of immense importance to the whole eastern Pennsylvania area, because approximately one-fourth of the people of Pennsylvania live in the Schuylkill Valley and that river has been used as a source of water supply. When we started this clean-up the Schuylkill was so filthy that if you put your hand in 4 inches of water you could not see it. And, yet, most of the water supply for the great industrial area of Philadelphia came from this stream.

Chairman McKellar. That has been changed and you now have good water there?

CLEAN-UP OF RIVER WATERS

Senator Duff. You can take a silver dollar and throw it in the bottom of that stream. You can see it at the bottom of the stream in the places where it is cleaned where formerly you could not see in 4 inches of water. The Commonwealth cleaned the stream from Norristown all the way to the source.

We have taken out of the Schuylkill River in the last 4 years 20 million tons of silt, and that 20 million tons has been put into 23 impounding basins. That 20 million tons represents from 50 to 70 percent anthracite coal that formerly was lost in the process of dumping all the coal washings into the river.

The way that works is this, and the reason what we are asking here is important is because it shows what takes place if it is not done. We have built three desilting basins into which that black coal water flows. Then there is a settling and deposition of the silt in the desilting basins. Then the silt is taken out by pumps and put in impounding basins on the side of the river. In the impounding basins there is a kind of weir that keeps raising up as it drops out the heavy material, and lets the clean water flow back into the stream.

As I say, we have those 23 impounding basins along the river plus the three desilting basins. It has been a completely successful operation.

Senator Ellender. The cost of those impounding basins was paid for by the State?

EXPENDITURES BY STATE

Senator DUFF. Yes, sir. In the past 4 years the Commonwealth of Pennsylvania actually has spent $35,000,000 in cleaning up the stream from Norristown to the source.

Senator ELLENDER. Plus the building of these basins?

Senator DUFF. No; the $35,000,000 is the complete cost. Remember, that the responsibility of the State is from Norristown to the source, about 90 miles. The Federal Government has the responsibility from Norristown down through tidewater to Philadelphia.

Senator CORDON. How far is that?

Senator DUFF. I would say that is about 24 miles.

SILT DEPOSITS IN SCHUYLKILL RIVER

At any rate, what happened is that at high water you have had the push of this silt downstream, and it is gradually filling up in Philadelphia and around the navy yard.

To give you an idea of the extent of the deposit of silt in the river or the importance of it, let me illustrate. I do not know how high the ceiling is in this room, but there are places in this stream where the stream bed had been filled up with 26 feet of silt. You could walk along the stream and look up at places higher than the sides of this wall and see roots growing up there. The reason was that that depth of silt had been taken out. So, the clean-up has prevented flooding in the industrial areas in the upper part of the stream.

Senator ROBERTSON. You have done some of that in Philadelphia?

Senator DUFF. Yes, sir.

Senator ROBERTSON. I remember, when I was in Philadelphia in 1948 for a little get-together up there in July, we rode up the river to look at what you have been doing.

Senator DUFF. That has been done very largely by the city of Philadelphia within the municipal limits. The reason they did that was because there was such an accumulation of silt near the pumps for the city water intake that they were not even able to make their pumps work. The naval yard is located in the fourth district in Philadelphia.

SALVAGE VALUE OF SILT

Senator CORDON. Is there any salvage value in the sediment deposit found in your basins?

Senator DUFF. Yes. I would say there is not less than 40 percent anthracite coal in all of it; and in some of it, as you go farther upstream before you start getting the good top soil mixed in with it, it is 70 percent pure anthracite coal, and that ultimately is recoverable, and will be actually processed and used when the price of coal will justify its use.

I was at the navy yard one day at a review when the U. S. S. *Wisconsin* was put into service. I was asked by the then commandant of the naval yard, Admiral Draemel, to come aboard and everybody was at attention. It was a terrifically hot day. The stench from the filth in the river was so great that a number of people vomited over the side of the ship. And yet that is a stream from which the people get most of the drinking water in the area that surrounds Philadelphia.

When Admiral Draemel retired from the Navy, I asked him if he would not take charge of the desilting process in this stream for the State.

Senator ROBERTSON. That stream flows through the biggest park that Philadelphia has?

Senator DUFF. Yes.

EFFORTS BY STATE AND PRIVATE GROUPS

In addition to the $35,000,000 that the State of Pennsylvania has expended in the cleaning up of this stream, the city of Philadelphia has already expended over $25,000,000. If you had ever crossed the ferry down at New Castle on the Delaware, below Philadelphia, which I frequently have done, on a real hot day before this clean-up was started, it was with extreme difficulty that you could retain what you had eaten at the previous meal on account of the stench even that far below Philadelphia. I can say to you if you go down there now as a result of what the State has done—and I also give due credit to the city of Philadelphia on account of the immense job they have done—it is like a different place. Then the other value is that this is the water supply for industrial and drinking purposes for a great part of the eastern sector of Pennsylvania.

To show you a further reason why we do not want anything to happen to stop this wonderful project, a great number of industries that formerly put all their waste in this stream have been so pleased with what has happened that they have collaborated wholeheartedly in the clean-up. I was at a dedication of a new mill in Pennsylvania 2 years ago. The president of that concern, after speaking of the new $10 million mill, said, "I want you to go around back and see something." He showed me a $1 million installation that they had made for the purpose of removing what they formerly dumped in the river in the way of pollution. He was not doing it as a matter of compulsion but as a matter of great public elation that they had spent that much to perform this public service.

I want to say to you gentlemen that in my judgment this is the greatest water-reclamation project anywhere at the present time in the Nation. I do not think I need to say to any of you how important good water is getting to be. I do not know of any place where it will be a greater mistake to cut down on the funds that are necessary for the Government to carry out an express contract. The Government made a proposition to the State which possibly they never expected to be performed: that when the Commonwealth had done 50 percent of what our job was—Norristown to the source—then the Government would come along and do theirs.

Senator ROBERTSON. Congress did not know you were going to be Governor.

Senator DUFF. I would like them to show their appreciation now.

Senator HOLLAND. Are the amounts that you mentioned as having been expended by the State and by the city of Philadelphia gross amounts or net amounts after the application of the salaries?

FUNDS RECOVERED FROM SALE OF COAL FROM SILT

Senator DUFF. No, those are gross amounts. There is no net amount for the city of Philadelphia. What they have spent, they

spent for interceptor sewers and plants for the purpose of taking the pollution out of the water. As far as the State is concerned, of this $35,000,000 that we spent, there will be recovery for that coal contained in the silt. We have advertised it several times for sale already. But there have been no bids for it, because, as you know, the hard coal market has not been too good; but ultimately there will be at least 50 percent of that 20 million tons that will be recoverable. It will pay to take it out and recover it when the price of fuel justifies the expense.

Senator ELLENDER. What do you estimate to be the value of that, Senator?

Senator DUFF. I can say this to you, that one of the big coal concerns in Pennsylvania that dumped a vast amount of this silt into the stream, because they did not want to be put to the expense of keeping it out, spent $1,500,000 for the purpose of taking it out to comply with the law in Pennsylvania. At the time they were spending that sum I was subjected to considerable criticism for that expenditure. But several years later I had the pleasure of attending a meeting when the president of the company got up and said, "I wish we had done it years before," because they had made a tremendous saving of coal formerly lost.

There is a tremendous saving. Everything that is recovered is that much saved that eventually would have found its way into the Atlantic Ocean.

Senator ELLENDER. That would leave about 10 million tons?

Senator DUFF. Yes, sir. The reason I am not answering you specifically is that I do not know what the cost will be of the reclamation and separation in those desilting basins. It will be more or less expensive because the State will not allow them to put any of the waste back into the stream because that would be merely negativing what we have accomplished.

Senator HOLLAND. You make briquettes or something like that?

Senator DUFF. I have no doubt that eventually that will be done.

HOUSE ACTION

Now this item in the President's budget was $1,900,000. The House cut it $900,000. We feel very strongly that it is a tremendous mistake in view of the $35,000,000 that the Commonwealth of Pennsylvania has spent and the $25,000,000 that the city of Philadelphia has spent, to be parsimonious about anything that is so essential as this project to the security and safety of that whole region of Pennsylvania.

1951 APPROPRIATION

Chairman MCKELLAR. What did you get last year?

Senator DUFF. There was $400,000 set up in the way of plans. The Government has done nothing in the way of actually taking silt out of the stream and putting it into any of these basins. Part of the agreement, sir, was that the State would pay for the sites where the Government basins would be erected. It is my understanding that that has been done and the Government is prepared at this time to proceed.

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I do not like to take too much of your time but I have been intensely interested in the whole water system in Pennsylvania.

Chairman McKellar. I should think the most important thing in the world would be to have good water in a great city like Philadelphia.

PENNSYLVANIA RIVERS SOLE SOURCE OF DRINKING WATERS

Senator Duff. For example, let me show you again in another part of the State where the same question arises. In the great interior city of Pittsburgh, which is probably the greatest productive center for steel in the whole world, because during the last was Pennsylvania as a State produced more steel than any nation in the world except the United States, the sole source of water for drinking purposes and industrial purposes in that great industrial area of western Pennsylvania is out of those interior streams. There are no mountains to go up and get a big supply of water, so they have to drink that river water. Therefore the matter of all expenditures on those streams is of vital importance to this great industrial set-up.

Chairman McKellar. It must be very expensive to make that water pure?

Senator Duff. It is not only very expensive but I can say this to you, which will be interesting for you to know, that after we have used the present methods for purifying water in the Pittsburgh area the water is still so hard—and by "so hard" I mean it has so much impurity in the way of acid—that if you put in brass or galvanized iron plumbing in the Pittsburgh area at the end of a 10-year period if you take a piece of plumbing out you will find that it has holes in it, you can hold it up and see daylight through it. That is the kind of water we have. That is the reason that everything concerning water in our area is of vast importance.

When you come down to this Conemaugh River Reservoir, which is on the list, you will find that in the soft coal area of western Pennsylvania we have a peculiar problem. Our coal is mined mostly up in the side of the hills at places under the water tables of much of the underground water in that country. Therefore, when you take the coal out, you also let down through the cracks that break in the upper strata a vast amount of water. That becomes impregnated with a high degree of sulphuric acid. That sulphuric acid, in turn, finds its way into the stream and that is what causes the hardness about which I am telling you. That hardness is not only inimical to the interior structures of the human being but also to boilers and any other places where you have an industrial installation.

Senator Robertson. Of course it kills all the fish.

Senator Duff. Yes. Not only is there not a fish living there but even a respectable germ will not live in that water.

Senator Robertson. That is called acid mine waste from bituminous?

Senator Duff. Yes, sir.

CONEMAUGH RIVER RESERVOIR

Here is what I want to emphasize, if I may, in conjunction with a reservoir such as the Conemaugh—it is not only a great thing in the

way of preventing floods in the Pittsburgh area. Here is the process that goes on. During a period of ordinary dry weather, such as you have now, or sometimes exceedingly dry weather, your acid mine drainage becomes concentrated because the amount of water is small in total volume as compared with the total amount of sulfuric acid. The result is that you get tremendous accumulations of acid mine drainage that greatly interfere with the consumable water supply. The Conemaugh River area has a lot of soft coal. During the dry period that dam catches this acid mine drainage that ordinarily would come down to Pittsburgh through the Allegheny River and thence into the Ohio River and all down that great industrial valley. The Conemaugh Dam stops that acid mine drainage. Then when high water comes it is fed out slowly so that the proportion of acid is less to the total volume of fluid. When this feed out is done then they shut the gates and prevent a flood. So it has a double purpose.

For these reasons this Conemaugh River Reservoir is immensely important. The Allegheny, Monongahela, and Ohio Valleys around Pittsburgh have the greatest industrial concentrations anywhere in America. Therefore, I do not see how it is possible to separate these water facilities from defense items in view of the fact that they are ingredients that determine whether or not you have the kind of set-up that will operate at maximum efficiency. For these reasons I think it would be a great mistake to cut these items. They are not boondoggling items but something that goes into the very essence of the defense effort.

RESTORATION REQUESTED

Senator ELLENDER. The House allowed for that project $8,400,000 and you are asking for restoration of $1,600,000?

Senator DUFF. Yes, sir. I do not know of a single thing that goes into the manufacture of steel that is more essential in the over-all picture. I have taken the attitude all the way through that we ought to cut out all items that are not a matter of defense, but this goes directly to defense.

Another item is the locks on the Monongahela. Here is the situation on the Monongahela River. As you know, in the area close to Pittsburgh you have your low sulfur coal in upper the Monongahela region. The low sulfur coal is necessary in the making of steel. As a matter of fact, in some of the mines in the immediate Pittsburgh area the sulfur in places will run as high as 4½ percent. If you get down in the upper reaches of the Monongahela River where you are opening these great fields in Greene County in southwestern Pennsylvania, your sulfur will be less than 1 percent. That is the kind of low sulfur coal you need in the steel business.

NAVIGATION ON UPPER MONONGAHELA RIVER

Now I am sure there is no doubt in your minds that the Monongahela River is getting to be one of the great interior waterways for feeding coal to the great industrial area along the Monongahela, the Ohio, and the Allegheny Rivers. As a matter of fact, if you go 40 miles down river from Pittsburgh and about 20 miles up, the river valleys are almost completely industrialized all the way. There is an enormous volume of traffic on these three rivers. I do not want

to be held to this as a matter of a completely accurate statement, although I believe it is so, but I think that the volume of traffic moving out of Pittsburgh on the rivers each year—I am sure it is far ahead of the Suez Canal in total volume—is greater than through the Panama Canal. Maybe that is not right, but if it is not I will correct it.

Chairman McKellar. It goes first down the Ohio and then down the Mississippi?

Senator Duff. It goes 981 miles down the Ohio where it joins the Mississippi.

Chairman McKellar. Then it goes all the way to the Gulf of Mexico?

Senator Duff. Yes, sir.

Chairman McKellar. Do they not take barges up there carrying heavy freight?

Senator Duff. Yes, and they bring oil to Pittsburgh from the Gulf this same way.

Senator Cordon. Is there a project here?

Senator Duff. Yes, sir; this is the Monongahela in West Virginia, these locks.

There is an interesting observation that I think you will find in connection with this, that despite the size of the Missouri River, the Ohio River puts more water into the Mississippi than any other of the tributaries of the Mississippi.

Senator Stennis. It is larger than the Mississippi where it comes into the Mississippi.

MONONGAHELA RIVER LOCK SYSTEM

Senator Duff. Yes, sir. In the Pittsburgh area, traffic instead of decreasing, as you might expect it would do by reason of expansion elsewhere has been increasing on account of the immense advantages of a number of situations in this area. This Monongahela River lock system is part of the means of bringing into that area what they need in the way of coal to feed this tremendous expansion of the steel industry which there is there.

Senator Robertson. Governor, that is nearly a $32,000,000 project.

Senator Duff. I am not talking about the $32,000,000. I do not like to see this $4,000,000 lost.

Senator Robertson. I am wondering what the rail service is to that area. I understand if the Government would put thirty-million-odd dollars into this navigation on the Monongahela, that the steel companies could get the coal cheaper.

Senator Duff. Here is the way I think the thing is most efficiently and effectively handled. What they do in these new mines they are opening about along the river is to load coal by conveyors right into big river barges. Then they bring the coal down the river in the barges into these big steel plants. in the Pittsburgh area. They can unload these barges while you are talking about it getting out of railroad cars.

Senator Robertson. But West Virginia has a Monongahela project and that coal is 50 or 75 miles from the river, and it is brought down by some subsidiary of the B. & O., I think, and they want the same

kind of transportation down to the Weirton steel mill. Is that in West Virginia?

Senator DUFF. You see, you have a strange geology there in western Pennsylvania. The Monongahela River flows due north from West Virginia to Pittsburgh, where it joins with the Allegheny to form the Ohio. Then the Ohio flows due north to Beaver, then west, then south, and thereby makes a big horseshoe. So this coal that you are asking about, Senator Robertson, comes due north from West Virginia to Pittsburgh, then west and then south and thus back again to another part of West Virginia. It has traveled clear around this big horseshoe in the process of getting there.

Senator Martin has covered the Williamsport and the Clarion River projects. I will not take your time on those, because he has in detail given you what I would merely repeat if I went over that now.

Chairman MCKELLAR. Do you have a statement you wish to put in the record?

Senator DUFF. No, sir. I will get the data on the amount of freight going out of Pittsburgh each year.

Chairman MCKELLAR. I would like to know how much comes into Pittsburgh at the same time by way of the river.

Senator DUFF. An immense amount comes in.

Chairman MCKELLAR. I know there is, but is it oil, principally?

Senator DUFF. With these big deposits in Venezuela of iron ore I have been told, although I do not know whether this is correct or not, that some of that will come into Pittsburgh by water through the Gulf.

Chairman MCKELLAR. Are these barges so made that they will take a load north to Pittsburgh from the Gulf?

Senator DUFF. Yes, sir.

Chairman MCKELLAR. And then take another load back?

Senator DUFF. Yes, sir. The fact is that most of the oil companies bring oil and gasoline to Pittsburgh by water from the Gulf. In the old days, before you had the big locks on the Ohio which you have now, you had those paddlewheel steamers like the *Robert E. Lee*, but in order to get power you had to have a big wheel and they get on the bottom pretty often. Now they have the twin screws with tremendous power and they go along there the way they do in New York Harbor.

Senator ROBERTSON. Did I understand you to say that during World War II Pennsylvania produced more war materials than Germany?

Senator DUFF. Yes, sir. I will make this statement and put it in the record, that in World War II, Pennsylvania produced more steel than any nation in the world except the United States, that Pennsylvania produced more steel than Germany and almost as much steel as Germany and Japan combined, that it produced twice as much steel as Russia and almost as much as Russia and England combined.

Senator STENNIS. Governor, that is a very impressive statement.

Chairman MCKELLAR. We are very much obliged to you. You have made an interesting statement.

Senator DUFF. I am very much indebted to you for your indulgence.

STATEMENT OF HON. JAMES E. VAN ZANDT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

TYRONE PROJECT, PENNSYLVANIA

Chairman McKellar. The next witness is Congressman Van Zandt of Pennsylvania.

Representative Van Zandt. Mr. Chairman and gentlemen of the committee, my name is James E. Van Zandt, and I represent the Twenty-second District of Pennsylvania.

I have with me Mr. Raymond A. Hagerman, burgess of the Borough of Tyrone, Pa. I desire to make a statement and then I wish to introduce Burgess Hagerman.

Mr. Chairman, I am appearing before you this morning in behalf of the Tyrone, Pa., project, which was authorized by the Flood Control Act of December 22, 1944, Public Law No. 534, Seventy-eighth Congress, second session; House Document No. 702, Seventy-seventh Congress, second session.

TOTAL ESTIMATED COST

The project which the Army engineers estimate will cost $6,650,000 has not been initiated because of the lack of an appropriation, even though the Commonwealth of Pennsylvania and the Borough of Tyrone have agreed to assume the local cost in the sum of $335,400 for lands, rights-of-way, and utility changes.

The project itself provides for the construction of protective works which will consist chiefly of 4,700 feet of earth levee and 200 feet of concrete flood wall on the left bank of the little Juniata River, 3,900 feet of channel enlargements, and 900 feet of pressure conduit along Bald Eagle Creek, 700 feet of channel enlargement and 1,850 feet of pressure conduit on Sinking Run, a pressure conduit on Schell Run, pumping stations, and appurtenant drainage structures. The project is designed to take care of a drainage area approximating 400 square miles and will protect the community of Tyrone, Pa., against flood discharges somewhat greater than the maximum floods of record which occurred in 1936 and 1950.

Since my return to Congress after World War II, not only have I been in frequent touch with the Army engineers and the Bureau of the Budget, but I have appeared before congressional committees pleading for an appropriation to make possible the construction of the Tyrone flood control project.

Chairman McKellar. Congressman, has the construction been started on it?

Representative Van Zandt. It has not, but the survey and planning have been completed.

Chairman McKellar. You did not get a budget estimate?

Representative Van Zandt. We did not; no, sir.

Chairman McKellar. But the Corps of Engineers recommended it?

Representative Van Zandt. Yes, sir.

Senator Young. What is the total estimated cost?

Representative Van Zandt. $6,650,000.

AMOUNT REQUESTED

Chairman McKellar. What are you asking for now?

Representative Van Zandt. We are asking for the $6,650,000.

Senator Young. Can that be completed in 1 year, General Chorpening?

Chairman McKellar. I should think it would take more than 1 year to finish a project of that kind.

Representative Van Zandt. That is true.

General Chorpening. The present plan of construction on that will be over several years. I am not prepared to state at this moment what we could possibly use the first year. I can do so later for the record.

Chairman McKellar. I wish you would and place the information in the record.

General Chorpening. Yes, sir.

(The information referred to is as follows:)

All planning work on the Tyrone project has not been completed. However plans have been advanced to a point where they could be completed promptly, and the project initiated during fiscal year 1952. An appropriation of $1,000,000 for the first construction year would permit completion of the plans and initiation of construction on the upper end of the project.

AMENDMENT DEFEATED IN HOUSE

Representative Van Zandt. Recently when the bill you are now considering was before the House, I offered an amendment to include the necessary appropriation for construction of the project. The amendment was defeated principally because the amount was not included in President Truman's budget recommendations for the fiscal year 1952. I hope that you will not take the same attitude as the House did because the people of Tyrone have a serious problem, and are entitled to assistance from the Federal Government in solving it. The Borough Council of Tyrone and the Commonwealth of Pennsylvania complied with the request of the Army engineers to furnish assurances of local cooperation required by the legislation authorizing the flood control project and the district Army engineer informed me on June 29, 1949, that satisfactory assurances of local cooperation were formally accepted by the Baltimore district office on June 28, 1949. These assurances include the assumption by the State of Pennsylvania and the Borough of Tyrone of the local cost in the sum of $335,400 for lands, rights-of-way, and utility changes.

FLOOD THREATS

The citizens of Tyrone are gravely concerned over the threat of recurring floods similar to those that have plagued them since 1936 and which have caused losses totaling millions of dollars. Incidentally, last May on the very day I was engaged in presenting my amendment in the House to provide the money for the Tyrone project, the community of Tyrone was threatened with another flood and luckily the waters abated before inflicting serious damage, such as occurred in 1950 when the damage amounted to approximately $1 million.

As I have said the citizens of Tyrone are deeply concerned because they see in the future other disastrous floods, unless flood conditions are corrected immediately.

Tyrone, Pa., has a population of about 9,000 and is a well-developed and thriving community. The stream that is responsible for the flood flows through the very heart of the community and with one flood after another causing mounting losses, it is impossible for the citizens of Tyrone to assume the financial burden placed upon them since 1936. I ask you to put yourself in the position of a home owner or a businessman in Tyrone, who, year after year, is called upon to assume increasing cost because of the flood damage inflicted upon him.

At this point I would like to introduce Mr. Raymond Hagerman, the burgess of Tyrone, and let him proceed to tell you about the problem as he sees it, since he is speaking for the people of Tyrone.

LOSSES FROM FLOODS IN PRIOR YEARS

Senator YOUNG. May I ask a question first? Do you have an estimate of the losses from floods over the past 10 years?

Representative VAN ZANDT. Yes; they are contained in the records of the Army engineers in the hearings before the House.

Chairman MCKELLAR. Can we get that from you, General?

General CHORPENING. Yes, sir; we can insert that in the record.

(The information referred to is as follows:)

DATA ON FLOOD DAMAGES AT TYRONE, PA.

Major flood damages at Tyrone, Pa., were caused by the floods of March 1936 and November 1950. Damages from the March 1936 flood amounted to $1,610,700, and damages from the flood of November 1950 amounted to $700,000. These damages are based on price levels which prevailed at the time of flooding. It is considered that based on present day price levels, the damages from the 1936 and 1950 floods would have amounted to $3,524,600 and $721,000, respectively.

STATEMENT OF HON. RAYMOND A. HAGERMAN, BURGESS OF THE BOROUGH OF TYRONE, PA.

TYRONE PROJECT, PENNSYLVANIA

Mr. HAGERMAN. Mr. Chairman and gentlemen of the committee, I cannot tell you how much I appreciate the kindness and courtesy in allowing me to come here from our little humble town in the midcentral part of Pennsylvania. Of course we are not versed in the procedure on these things but I certainly do want to tell you from the bottom of my heart our story up there.

We have our two august Senators here and they emphasized Philadelphia and Williamsport, and they are big centers, but, after all, you gentlemen realize that in our own home town the street that means the most to you is the one at your front door. That is where we live and have our businesses up there in the mountains of Tyrone at the confluence of the Juniata River, Bald Eagle Creek, and other streams coming in there.

1936 FLOOD

Now in our disastrous flood of 1936 this great Government and the United States Army engineers came up there, looked the proposition over, and decided themselves, without our asking, that we should

have some protection, some engineering means instituted, and work of that character, to give us the right to live, the right to have the protection that any other citizen has.

Senator CORDON. What was the property loss in that flood?

Mr. HAGERMAN. At that time the property loss ran about $1,500,000. That was their estimate and it checked pretty closely with ours. We took a house-to-house and business-to-business estimate and figured out from furniture, goods, materials, drugs, machinery, et cetera, bridges and houses that were lost in that particular flood. That is how we arrived at the estimate. It was not a hypothetical figure. It was an actual figure. We tried to do the best we could by getting the data on the ground.

Chairman MCKELLAR. How many people live at Tyrone?

Mr. HAGERMAN. Nine thousand, sir.

Senator ECTON. What has contributed to this flood situation since 1936?

WATER RUNOFF

Mr. HAGERMAN. There had been no major flood since the flood of 1889—that is when the Johnstown flood occurred—until the flood of 1936. The conditions remain the same. The soil up there is not very deep. The impervious soil is about an average of 18 inches on those mountains underneath the top soil. You have what the Army engineers call a complete state of saturation which gives us 100-percent runoff.

We have had it rain practically 4 inches in an hour's time, a deluge, downpour, and it seems due to our topographical conditions that we sometimes have protracted rains from 36 to 48 hours, and in that interval the ground becomes saturated, especially if it happens in the late fall and winter, like it did last year, when the ground is frozen. We have a complete runoff, and the streams will not take it.

Since 1936 we have cleaned out our streams to the best of our ability. We spent all the money that Tyrone had. We had to raise a bond issue of $136,000 to help us out at that particular time. Since that time the streams have been filled up with debris from the floods. I would say that the average passageway has been impaired 30 percent, in some places over 30 percent, with the stream bringing down gravel, sand, and debris of all kinds and deposits, until today the stream channels are so constricted and restricted by this debris that is deposited in the stream that any time we have a rise in the water or protracted rain for 24 hours we are bound to have a flood.

It is only the fact that the rains stopped in May that prevented another flood. It was in the streets in the town and I would say that four more hours of rain would have given us 4-foot inundation in some sections of the town. But that destroyed a lot of property. Our merchants have to use cellars for storing merchandise. One drug store lost $15,000, a loss that it could hardly afford to have, because the flood waters came up so quickly, and they came into the cellar and destroyed the merchandise. That is one case of many. That is our situation up there.

CONSTRUCTION PLANNED

At the present time, the crucial point is Sink Run. The Army engineers have said we should put a channel under Fourteenth Street

in Little Baltic Street, because it has such a crooked tortuous path that it simply retards the flow.

The Army engineers have made a wonderful study of all these streams and have figured out a project which is foolproof with their pumping stations, and so forth, and we have agreed and signed up to spend over $300,000 which they claim will be our share of the proposition and also have appropriated for pumping stations.

Now, again, when Senator Duff was talking and extolling the clear waters of Pennsylvania, we think that is fine, but while he was doing that he also shoved the burden of over a half million or three-quarters of a million dollars on little Tyrone for putting in disposal plants.

We are not taking on that. You see the acuteness of our problem. We are not coming down here to beg for something that is not tenable, something that is not necessary, but we are asking for something that we cannot afford to do ourselves. We have not the means. But we are crying to you gentlemen just like a voice cries out in the wilderness. You are the alpha and omega of this proposition. We have faith in the Senators; you are good people despite what the papers say about you. You are down here to do the best you can for your country.

Senator THYE. The first time that you hear someone refer to Congress as scratching one another's back and that it is pork-barrel legislation, will you speak out and explain to the folks how it affects you when a project is denied and how worthy a project like yours will be if it is approved?

Yet, on the Senate floor, we will probably be accused of pork-barrel legislation if we give favorable consideration to the appropriation that you are now requesting.

I only bring this out because I have been accused of pork-barrel legislation when it was to aid communities like yours in trying to overcome a situation that they could not cope with individually as a city of as a community.

I am sorry to have interrupted you, but I sympathize with you.

Mr. HAGERMAN. I am glad you said that. I realize these nasty, unkind, and improper remarks that are made. All of you gentlemen, after all, have been selected by the people of your various States and Commonwealths to represent them. If you were not outstanding men you would not be here. That is one thing sure.

I realize that you have brains, you have ability, and I know by the grace of God you have some hearts in you that you do hear the little people crying out about these things. This is the only place to come; this is our court of last appeal.

I cannot tell you, on behalf of the people in our little, humble community that I represent, the appreciation for the privilege of coming down here and telling you at first-hand our story, because, gentlemen, to me it is a most serious situation to the 9,000 people that I represent.

It is a great country, it is important wherever you might be, but Tyrone, back in the Allegheny Mountains, being the gateway to the Alleghenies is the town where I try to run a humble government in a decent, humble, law-abiding way, and we come down to this Government in Washington which we think is the hope of the whole world.

I feel in my heart, gentlemen, that I am not going away from here empty-handed. I believe probably you will do something for us. If

you cannot see fit to do anything else, we will appreciate mightily if you will give us enough money to clean the canals out so we can confine the waters there at the present time.

AMOUNT REQUESTED

Chairman McKellar. How much would that take?

Mr. Hagerman. To do what is the acute part, I would say the Sink Run proposition, would cost around $300,000 and probably about $400,000 to $500,000 to clean up the rest of the stuff. However, I do not want to be held down to the dollars because I do not know.

Chairman McKellar. Is that your estimate, General?

General Chorpening. Yes, sir; I think that is about right.

As I said before, I want to look into this a little more and we will supply for the record what we could economically and properly use the first year.

Senator Young. Just what type of project is this besides channel clearance? Is it levees?

General Chorpening. Levees, flood walls; there is channel clearance, pressure conduit, pumping stations.

Senator Ellender. Who maintains the pumping stations?

General Chorpening. The local interests are required to do all maintenance.

Senator Holland. Was there any loss of life during any of these floods?

Mr. Hagerman. Thank God, no.

Senator Holland. You have no navigation projects there?

Mr. Hagerman. No, sir.

Senator Holland. The channels are not navigable?

Mr. Hagerman. No, sir.

There is one thing I would like to inform you of. That is in line with the stream-cleaning proposition that Governor Duff instituted and put through so ably.

We have created the authority with the power to make the bond issue necessary to go ahead with that stream. That is in addition to anything else. That is another reason why we are unable financially to do anything more for ourselves. We spent $132,000 in the 1936 flood. Of course, naturally, this other stuff coming on and we have obligated ourselves now for over $300,000 for this flood-control proposition which we will endeavor to carry out.

We will have to raise a bond issue somehow for that. Our treasury is 100 percent depleted.

One thing we are proud of is the fact that in 25 years we have not raised taxes in Tyrone. The taxes are still the same.

Chairman McKellar. They are lucky people.

Mr. Hagerman. I will tell you what we have tried to do. We cut the cloth to fit the table, and when the people want a lot of irrelevant things, we say, "Gentlemen, you pay for them. If you do not want to pay for them, you will not have them."

We do the things that are essential and just, like this. It is something that has to be done.

We are going to go the limit as far as our financial means are concerned. We will be grateful to this august body for any consideration you might give our humble town.

I want to thank you for this opportunity.

Never let it be said or thought in your minds that Burgess Hagerman talks about pork barrel or anything else.

I realize that you men work in this hot climate down here. I do not see how you stand it.

I understand you work until 6 o'clock in the morning trying to do a job for an ungrateful citizenry.

That is the thing I can probably best say to you.

I want to thank you on behalf of the citizens of Tyrone.

STATEMENT OF HON. ALVIN R. BUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

WILLIAMSPORT FLOOD-CONTROL PROJECT, PENNSYLVANIA

Chairman McKellar. Congressman Bush?

Representative Bush. Mr. Chairman and members of the committee, what I have to say about the Williamsport project is pretty much a repetition of what Senator Martin has said. My home is in the Williamsport section as well as my business. I am thoroughly familiar with this area, know the conditions, and know what you men are up against in trying to allocate funds for flood-control projects.

At a time of an emergency like this, we like to do everything we can to save money but here is an authorized project that the people themselves are bonded for. The city voted a bond issue in order to purchase the rights-of-way to make it possible for these dikes to be built.

The plan was that they would be built if the citizenry bought the right-of-way. That has all been taken care of. The dikes have been built in the Williamsport proper and south Williamsport areas but the project is not complete without the completion of the Newberry section, which is in the western end of our city where 9,000 people live.

We have 11 industries as well as our railroad yards located in this section.

Now, if we can get this $775,000 to complete the two units in the Newberry section, then these people will be afforded the protection which must be had to save them from future disastrous floods.

I have gone through three major floods, gentlemen, in this particular area since 1936.

Unless you have experienced them you cannot appreciate the damage, the hardship, and the loss that is connected therewith.

AMOUNT REQUESTED

I want to add my plea that you give every consideration that you can to our request for $775,000 to continue this work which the Army engineers indicate is a continuation of the authorized Williamsport flood-control program.

I thank you, Mr. Chairman.

Chairman McKellar. We are very much obliged to you.

STATEMENT OF BRIG. GEN. CLAUDE H. CHORPENING, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS

QUINBY CREEK PROJECT, ACCOMACK COUNTY, VA.

Senator ROBERTSON. Mr. Chairman, while we have a reasonably full attendance, I would like the engineers to be given 3 minutes on a little project in Virginia which means a lot to the local people, the Quinby project.

Will somebody for the engineers tell us in 3 minutes what the Quinby project is, also what the ratio of benefit to cost is?

TOTAL ESTIMATED COST

General CHORPENING. The Quinby project is an authorized project which was authorized in 1950. It is on Quinby Creek in Accomack County, Va. The total estimated Federal cost is $116,000.

Chairman MCKELLAR. What kind of project is it?

General CHORPENING. It is a project to deepen a shallow natural channel across the mud flats between Quinby Landing and deepwater in Upshurs Bay.

The authorized project provides for an adequate and safe entrance channel, mooring basin, and harbor of refuge, and would facilitate the safe movement to and from Quinby of small tankers, freight boats, seafood harvesting boats, and charter fishing boats.

The principal commerce of Quinby includes sea food, oysters, clams, crabs, scallops, and fish; coal, lime, barrel staves, fertilizers, and farm products.

The benefit to cost ratio is 4.6, which is extremely high.

AMOUNT REQUESTED

We think the project is well justified and can be done in one fiscal year for the sum of $116,000.

Senator ROBERTSON. Is it not a fact that the principal source of revenue of this community is sea food and the fishermen and hunters that come there to get into these fishing and hunting areas, marsh areas?

General CHORPENING. That is correct, sir.

Senator ROBERTSON. Is it not a fact that they do not have even a 2-foot channel for 200 yards from the landing?

General CHORPENING. That is correct, sir.

Senator ROBERTSON. Do you know of any community that is dependent for a livelihood on reaching a certain area that has no transportation whatever within 200 yards of where they have to make their living?

General CHORPENING. I do not know of any, sir.

Senator ROBERTSON. Is it not a fact that the engineers have laid out, surveyed the channel that you would build if this were authorized and the local people have raised some money to try to dynamite the mud out of there to get even a 2-foot channel?

General CHORPENING. I understand they have raised about $20,000 to do that; yes, sir.

Senator ROBERTSON. Is it not a fact that if we now supplement that by $15,000, they could get a 2-foot channel to let the little flat oyster boats and fishing boats in there?

General CHORPENING. That is correct, sir.

Senator STENNIS. The cost benefit ratio is 4.6?

Senator ROBERTSON. I thought it was up to 9.

I thought the testimony before the Public Works Committee showed the cost ratio 9 to 1.

Chairman MCKELLAR. What is the total amount?

General CHORPENING. The total estimated cost of this project is $116,000.

Senator ROBERTSON. I am not going to ask for an 8-foot channel, just 2 feet of water so they can get out their oyster boats and fishing boats.

Chairman MCKELLAR. Is there a budget estimate for this?

CHANNEL DEPTH

General CHORPENING. I would like to make one further statement, sir.

The 4.6 is on the basis of going down to the full depth of 8 feet, which is the project depth.

Now, if we went to some lesser depth, perhaps the immediate requirements would be arrived at and would have perhaps a higher cost benefit ratio.

Senator ROBERTSON. Of course, your project has a turning basin, and this 2-foot channel would have no turning basin.

Senator THYE. Is this an opening or outlet to a river or ocean?

Senator ROBERTSON. To the ocean.

Senator THYE. In other words, you have a little village that is landlocked with the exception of this little shallow stream?

Senator ROBERTSON. They used to have enough water but it silted there and filled up and they are isolated from an opportunity to make a living.

Senator ELLENDER. What are the possibilities of silting after this project is ompleted?

General CHORPENING. I do not think there will be excessive silting.

Colonel MILNE. Minor maintenance would be required but not major maintenance.

Chairman MCKELLAR. How long would it take to complete it?

General CHORPENING. I would think, sir, that we could do the whole work in a matter of 2 or 3 months.

Senator ROBERTSON. The Norfolk Dredging Co. told me if they got $116,000 they could dig that channel in 6 weeks.

General CHORPENING. I would rather have it less than I say than more.

Senator ROBERTSON. They say they could dig it in 6 weeks and not take any extra men or any extra dollars' worth of equipment or anything else. They have the dredges. They have the employees. They do not have the work because we are not putting in any dredging work down in that area this year.

Senator YOUNG. Is there a budget estimate?

General CHORPENING. There is no budget estimate, sir.

Senator ROBERTSON. Because it is a new project they cut it off at the stem.

Senator ECTON. How large is the community that would be benefited by this?

Senator ROBERTSON. Four or five hundred people.

Senator THYE. How many hunters would be accommodated? You mentioned hunters in your first statement.

Senator ROBERTSON. It is the finest marsh shooting that the world ever saw. It is excellent duck shooting and the finest kind of fishing. They get bluefish, sea trout, and at certain periods they get bonita, and large fish, channel bass, and drum. Poeple would flock in there if they could get out, but they cannot get out except at high tide.

Senator THYE. You mean they would come from the ocean if there was a channel?

You mean they would go up into that marsh from the ocean?

Senator ROBERTSON. They would go up into that marsh from the mainland. They have a little boat that goes out through this little channel and then they get out and find areas in the marsh where you can push the boat along over high grass. You sit down in front and these marsh hens that are bigger than the quail are sitting around in this marsh grass, they jump up and fly, and you have a nice time.

I would like to take you down some time. You would put in this whole fund if you had one shoot.

Senator HOLLAND. It has to be done at flood tide?

Senator ROBERTSON. But the main project is for these fishermen and oyster men to make a living. It is a defense project; we have to have food, you know.

Chairman MCKELLAR. All right. Is there anything further?

Senator ELLENDER. May I ask the general to give us the amount of money that could be spent wisely on Tyrone, Pa., next year?

General CHORPENING. I am going to put that in the record.

Chairman MCKELLAR. The committee stands in recess until 2 o'clock, gentlemen.

AFTER RECESS

Senator HAYDEN. While we are waiting, I would like to ask a few questions. I think Senator McKellar will be here in a few minutes.

LAVON RESERVOIR, TEX.

I would like to ask the Corps of Engineers about Lavon Reservoir in Texas.

As I understand it, that is a flood control reservoir, and construction was included in this year's appropriations?

General CHORPENING. That is correct, sir.

Senator HAYDEN. Is there any additional feature to it beyond flood control?

General CHORPENING. The dam is being built for flood control and water conservation and utilization, as well as abatement of stream pollution on that stream.

1952 BUDGET ESTIMATE

Senator HAYDEN. How much money is there in this bill for that project?

General CHORPENING. There is $1,200,000 in the present bill for continuation of construction on that project.

Senator HAYDEN. What will that be spent for?

General CHORPENING. That will be spent for work on the embankment, work on the spillway, on railroad relocation and land acquisition.

WATER UTILIZATION

Senator HAYDEN. Will the work that you are doing in 1952 permit the realization of this water conservation and utilization benefit?

General CHORPENING. No, sir; it will not. At the time we made our estimates for this year—and that was nearly a year ago—there were no plans on the part of local authorities presented to us for the utilization of any of that water.

Senator HAYDEN. That is why I am asking these questions. How much would it cost to provide those facilities?

General CHORPENING. I understand that to provide those facilities, which would consist of an intake in the reservoir and a pipe to bring it to proper sump on the shore, would cost about $300,000.

Senator HAYDEN. How would that be repaid?

General CHORPENING. That would be repaid by local authorities by amortization worked into the agreement with them, over a period of years, not to exceed 50 years.

Senator HAYDEN. My inquiry was related to the municipal water district that was formed. Is that the organization to pay for this?

General CHORPENING. I understand the local interests have now formed a municipal water district. They are organized and are ready to enter into an agreement with the Federal Government to use the water.

Senator HAYDEN. Was that district and that plan in existence when you made up this budget?

General CHORPENING. No, it was not.

Senator HAYDEN. Your budget was made up about a year ago?

General CHORPENING. That is correct, sir.

Senator HAYDEN. If this committee were to increase the amount allowed, could you include the facilities this year?

General CHORPENING. Yes, sir; we could include the required facilities, so that the local authorities could go ahead and put up their pumping house and pumping facilities.

I would like to say further, that we are going to make closure on this dam some time this winter and if these facilities are not put in now it will cost considerably more to put them in later. In other words, the water would be there, and it would cost a matter of $500,000 instead of $300,000.

Senator HAYDEN. It is a very substantial industrial district, and it is for the industrial water that that improvement is to be made?

General CHORPENING. There are about 12 localities in that vicinity which are banded together and have formed this district. They propose to use this water in the reservoir which has a storage capacity of 100,000 acre-feet for that purpose authorized by the Congress.

Senator HAYDEN. I thank you.

Senator CORDON. Why did not the local interests form the district earlier? They knew the dam made provision for the water. What was the reason for the delay?

General CHORPENING. Senator, I cannot factually answer that question. I assume there was delay in getting together and getting the people organized to do this.

Senator CORDON. Would it cost any more now than it would have cost had they had their district formed while you were still in the course of construction?

General CHORPENING. It will not cost any more other than the fact that a year or so ago the price index was lower and it has gone up since then.

Senator CORDON. That is their loss?

General CHORPENING. That is right, sir.

STATEMENT OF HON. EDWARD F. ARN, GOVERNOR OF THE STATE OF KANSAS

KANSAS RIVER FLOOD

Senator HAYDEN. I understand the Governor of Kansas would like to make a few remarks.

Senator FERGUSON. I will be glad to yield to the Governor.

Senator SCHOEPPEL. It is with considerable pride, Mr. Chairman, that we present the Governor of our State of Kansas, who is here today.

You will recall that the other day, when the two other governors appeared, Governor Arn was required to stay over in Kansas and could not be here. We are appreciative of the opportunity of presenting him here today. He will have a few words to say.

Senator HAYDEN. Governor, we will be pleased to hear you.

Governor ARN. Mr. Chairman and members of the Senate committee, I do appreciate this opportunity to appear here for just a moment. I want to express my appreciation and the gratitude of the people of Kansas for the time that you have given our folks and our neighbor governors, when they appeared before your committee the other day.

As Senator Schoeppel suggested, I am sorry I could not have been here at that time.

I also want to express my appreciation to your committee for the assistance that you have rendered in connection with this disaster which we have had in my home State and which affected, of course, some of our neighboring States.

I am not going into any details as to the extent of that disaster. You undoubtedly know the story. I will say that it is the most devastating disaster in the history of Kansas and the history of the area affected by it. It is just beyond description. You cannot get very much of an impression of the devastation from pictures or from words. You have to see it to realize just how bad it is.

We have had so many problems out there affecting the public generally that we do, of course, need some assistance; and I know that your committee and the Senate and the Congress generally are apprehensive of that fact. We appreciate the consideration which you have given that problem; and again I want to express, on behalf of the people of Kansas, our gratitude for your consideration of the problem which we have in connection with this devastating flood

Senator HAYDEN. Thank you.

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EMERGENCY FUNDS APPROPRIATED

I would like to inquire to the engineers in this regard, while the Governor is here. We have already appropriated $25,000,000, which is strictly a relief appropriation. It has been my understanding that there were to be some budget estimates submitted which might be included in this bill for some immediate work to be done that would be beyond the relief situation. What do you know about the status of these estimates?

General CHORPENING. Those estimates have been submitted to the Bureau of the Budget, sir, and a copy has been furnished this committee at the request of the chairman.

Senator HAYDEN. Thank you, sir.

Senator SCHOEPPEL. Thank you very much, sir.

STATEMENT OF HON. HOMER FERGUSON, A SENATOR FROM THE STATE OF MICHIGAN

DREDGING OF THE ROUGE RIVER

Senator HAYDEN. Senator Ferguson, will you proceed?

Senator FERGUSON. Mr. Chairman, I have asked for the opportunity of presenting Mr. Hazey, of Wyandotte, Mich., with respect to a situation existing in the Detroit River as a result of the Corps of Engineers' dredging activities.

I would like first to outline the facts of the situation as I understand them, before proceeding to have Mr. Hazey develop the facts further.

This is in the nature of an opening statement as to what I think he will be able to prove to the committee.

The Rouge River is a tributary of the Detroit River, flowing into the main stream just below the city of Detroit. The area is heavily industrialized and the vast Ford Motor Co. properties adjoin the Rouge River.

In addition to industrial waste, the Rouge River is also polluted in some degree by municipal storm sewers, which dump into it.

The Corps of Engineers has a responsibility for maintaining navigation in the Rouge River and conducts annual dredging operations there. The dredging consists to a large extent of contaminated solids, resulting from the stream's pollution. These dredgings are then taken out into the Detroit River and dumped at the head of what is known as Fighting Island. That island, by the way, is in Canada. That would be on the other side of the international boundary, but we dump on this side of it, on the Michigan side of the river.

Downstream from this dumping point is the populous city of Wyandotte, which obtains its raw water supply from the Detroit River. Although the city of Wyandotte has spent considerable money in developing its water purification plant, and in changing its raw water source, it contends that its water source is seriously affected by reason of these Corps of Engineers' deposits in the Detroit River. As a result, the city of Wyandotte wants to have the Corps of Engineers transfer its dumping grounds to a point farther downstream in Lake Erie, where there will be no danger of contaminating water supplies.

The Michigan Water Resources Commission vigorously concurs in this recommendation.

YEARLY OPERATING COSTS

The Corps of Engineers submits that whereas its present dredging of the Rouge River costs $75,000 a year, it would cost $225,000 a year to dump farther downstream, and that, in any event, it has no authority to incur this additional expense. The engineers further submit that the solution to the situation is not to change the dumping ground, but to eliminate the prime source of contamination in the Rouge River.

Now, there is no dispute over that contention. As a matter of fact, extensive efforts are being made to correct the source of this pollution. The Public Health Service informs me that it has made extensive investigations and that there has been received from the Ford Motor Co. a commitment to spend $2,000,000 to eliminate the source of pollution from its properties adjoining the Rouge River. But there are other sources of contamination that go into this small river. That program will be completely effective by the fall of 1953, and I am led to believe that when completed it will, in the main, have solved this whole problem.

The question is, however, one of reaching an interim solution to this problem.

At this point I would like to have placed in the record the commitment of Ford Motor Co., dated May 10, 1951, which Public Health Service is supplying me from its Cincinnati office. Also to complete the representations on behalf of the city of Wyandotte, I would like to place in the record a resolution of the State of Michigan Water Resources Commission, dated January 23, 1951; a letter to me from General Chorpening, Assistant Chief of Army Engineers, dated March 20, with reference to the foregoing resolution; a letter from the executive secretary of the Michigan Water Resources Commission, dated June 15, 1951, in reply to General Chorpening's statement; a resolution of the Wyandotte City Council dated February 20, 1951; a resolution of the Wyandotte City Council dated February 8, 1951, accompanied by a report of the City of Wyandotte Municipal Service Commission, and a resolution of the Wyandotte City Counsel dated June 26, 1951.

Chairman McKellar. Without objection, all of those documents will be inserted in the record at this point.

(The documents referred to are as follows:)

WATER RESOURCES COMMISSION, STATE OF MICHIGAN—RESOLUTION OF JANUARY 23, 1951

Whereas the Detroit River boundary between the United States and Canada is one of the great waterways of the world; and

Whereas millions of persons and hundreds of industries in the State of Michigan and Province of Ontario are dependent upon the waters of the Detroit River for their daily existence; and

Whereas the maintenance of the highest possible quality within said waters is necessary to the needs of area water supplies, recreation, and wild fowl; and

Whereas inexcusable pollution of said waters arises from dumping in the vicinity of Fighting Island in the Detroit River the material dredged from the Rouge River, because funds made available by the Congress are insufficient to permit dumping in less critical locations; and

Whereas the International Joint Commission, Federal and Dominion, State and Provincial, local and private agencies have joined forces to reduce Detroit River pollution, and their efforts cannot succeed without the understanding and necessary cooperation by the Congress: Now, therefore, be it

Resolved by the Water Resources Commission of the State of Michigan, meeting in Lansing this 23d of January 1951, That it go on record as opposing the disposal

of said objectionable material within the Detroit River and recommends that such dredged material should be disposed of in such manner and at such locations as will not result in harmful transfer of polluting substances; and further be it

Resolved, That sufficient additional appropriations be provided by the Congress of the United States to make possible compliance by the War Department, United States Army, Corps of Engineers, with the aforesaid recommendation; and further be it

Resolved, That copies of this resolution be sent to the President of the United States, chairman of the Public Works Committee of the House of Representatives, chairman of the Public Works Committee of the Senate, Michigan's Representatives in Congress, and other interested agencies.

Adopted upon motion by Mr. Beresford, supported by Mr. Manz, and unanimously carried.

Present and voting:

Albert E. Heustis, M. D., commissioner of health.
Glenn P. Manz, representing municipalities.
Stanley Fontanna, deputy director of conservation.
Irving Ronk, for State highway commissioner.
George S. McIntyre, deputy director of agriculture.
Victor C. Beresford, representing conservation groups.

(NOTE.—Quoted section of resolution extracted from Report of the International Joint Commission (United States and Canada) on the Pollution of Boundary Water—1950.)

STATE OF MICHIGAN WATER RESOURCES COMMISSION,
Lansing, Mich., June 15, 1951.

Hon. HOMER FERGUSON,
Senator, State of Michigan,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR FERGUSON: The commission has received and considered the report on disposal of dredged material in the Detroit River by General Chorpening, forwarded with your letter of April 3, 1951. If accepted, this would leave the matter precisely where it stood prior to adoption of our resolution on January 23, 1951.

In behalf of the various interests which this commission represents, the report must be rejected as being unresponsive to the annually recurring problem presented.

The matter at issue appears to be $150,000 per year required to make nonobjectionable the disposal of the material dredged from the bed of the Rouge River. In the event these funds are not now available to the Corps of Engineers or allocable to the Detroit district engineer's office for this purpose, we must respectfully request that Congress add this amount to the appropriation of the Corps of Engineers earmarked for the specific purpose indicated.

In defense of the present practice which is objectionable to the city of Wyandotte, as well as this commission, General Chorpening places reliance on certain conclusions extracted from the June–August 1948 report of the United States Public Health Service. Recent consultation with members of the Service and review of the entire report by us places a somewhat different aspect on this report and conclusions drawn from it by the Corps of Engineers.

In addition, the most serious effects of the pollution resulting from present dredge disposal methods occur not in the summer but in the winter period of the year in which recent dredging has taken place.

At best under present conditions, it will be several years before all improvements in Wayne County are completed so as to reduce to the minimum the amount of deposition of sewage or industrial waste solids in the lower Rouge River. We cannot see how the Corps of Engineers, aware of this fact, would wish to continue the present practice when a nonobjectionable one is available even at temporary additional cost to the Federal Government.

In addition, as we see it, present dredging and disposal practice violates the technical recommendations upon which the 1950 report of the International Joint Commission on the Pollution of Boundary Waters is based and Executive Order No. 10014 of the President (November 5, 1948). The program of this Commission (and its predecessor, the Stream Control Commission) for the protection of the

Detroit River, publicly announced in May 1946, has been the basis of subsequent State, municipal, and industrial effort.

A continuation of the present objectionable practice by an arm of our Federal Government can result in nullifying State efforts toward securing improved pollution abatement.

May we again request your cooperation with that of other Members of Congress to provide the necessary $150,000 in order that the Corps of Engineers may terminate this present objectionable practice and resulting unnecessary hazard to the public health at the earliest possible date?

General Chorpening's letter, enclosed with your letter of April 3, is herewith returned.

Respectfully submitted at the direction and in behalf of the Water Resources Commission.

WATER RESOURCES COMMISSION,
MILTON P. ADAMS, *Executive Secretary.*

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., March 20, 1951.

Hon. HOMER FERGUSON,
United States Senate, Washington, D. C.

DEAR SENATOR FERGUSON: Reference is made to your letter of February 5, 1951, transmitting for investigation and report a letter from Mr. Milton P. Adams, executive secretary, State Water Resources Commission, Lansing, Mich., and accompanying copy of a resolution adopted at a meeting of the commission on January 23, 1951, in opposition to the further disposal in the Detroit River of objectionable material dredged from the Rouge River. As you were informed on February 8, 1951, your letter and its enclosures were referred to the Division Engineer, Great Lakes Division, for a report.

The Rouge River is dredged annually by the Corps of Engineers at a cost of about $75,000. The dredged material, which is highly polluted, is deposited in the Detroit River near the head of Fighting Island, about 2 miles below the mouth of the Rouge River. Annual maintenance dredging is necessary to provide authorized project depths for the deep-draft ore, limestone, and oil carriers which use the river. The intensive industrial development along the shore precludes disposal of the dredged material on land.

In 1948 the United States Public Health Service, at the request of the Corps of Engineers, made a special study of pollution in the Detroit River as affected by the dredging operations. The Public Health Service reached these conclusions, among others: (*a*) The deposits in the Rouge River are highly polluted by sewage and industrial wastes; (*b*) the primary responsibility is with the municipalities and industries occupying the banks of the Rouge River and discharging inadequately treated sewage and industrial wastes into the stream; (*c*) the investigation did not demonstrate great degradation in the quality of the waters in and below the dumping area, nor did it demonstrate damage of great consequence to lower riparian users under conditions existing at the time of the study.

While the resolution of the water resources commission is directed to the disposal of the dredged material, the true remedy lies in eliminating pollution of the Rouge River. Changing the location of the dumping area would merely transfer the pollution problem to a different area while increasing the annual Federal cost of dredging from $75,000 to $225,000. The expenditure of funds appropriated by Congress for the maintenance of our waterways is limited to work essential to the requirements of navigation. While you may be sure that the graveness of the Rouge River problem is recognized, authority for the additional expenditure of Federal funds as proposed by the water resources commission does not exist.

I trust the foregoing information will serve your present purposes. I shall be pleased to furnish any additional information available upon receipt of your further request.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, United States Army,
Assistant Chief of Engineers for Civil Works.

RESOLUTION BY COUNCILMAN STANLEY GROAT, WYANDOTTE, MICH., FEBRUARY 20, 1951

Resolved by the City Council of the City of Wyandotte:

Whereas it has been called to the attention of the Wyandotte City Council by the State of Michigan Water Resources Commission by a resolution adopted by said commission on the 23d day of January 1951, the inexcusable pollution of water in the Detroit River arises from dumping the refuse and material from the Rouge River, a notoriously contaminated stream, in the vicinity of Fighting Island by the War Department, United States Army, Corps of Engineers; and

Whereas the water intake, the source of supply of all drinking water of the city of Wyandotte, is located directly to the south of the said dumping and in the direct path of the current of the Detroit River; and

Whereas this constitutes a hazard and the continuation of such practices will, without a doubt, contaminate the city of Wyandotte's water supply, causing an undue financial burden to the city and potential damage to the health of its inhabitants; and

Whereas the Detroit River boundary between the United States and Canada is one of the great waterways of the world; and

Whereas millions of persons and hundreds of industries in the State of Michigan and Province of Ontario are dependent upon the waters of the Detroit River for their daily existence; and

Whereas the maintenance of the highest possible quality within said waters is necessary to the needs of area water supplies, recreation and wildfowl; and

Whereas the International Joint Commission, Federal and Dominion, State and Provincial, local and private agencies have joined forces to reduce Detroit River pollution, and their efforts cannot succeed without the understanding and necessary cooperation by the Congress: Now, therefore, be it

Resolved by the City Council of the City of Wyandotte, State of Michigan, That this body does hereby record itself as unalterably opposed to the disposal of said objectionable material within the Detroit River; that such dredged material should be disposed of in such manner and at such locations as will not result in harmful transfer of polluting substances; and futher be it

Resolved, That sufficient additional appropriations be provided by the Congress of the United States to make possible compliance by the War Department, United States Army, Corps of Engineers, with the aforesaid recommendation; and further be it

Resolved, That copies of this resolution be sent to the President of the United States, chairman of the Public Works Committee of the House of Representatives, chairman of the Public Works Committee of the Senate, Michigan's Representatives in Congress and other interested agencies.

I move the adoption of the foregoing resolution.

Councilman Stanley Groat.

Supported by Councilman McEachran.

Yeas: Councilmen Brohl, Burke, Groat, Haynes, and McEachran.

Nays: None.

RESOLUTION BY COUNCILMAN RICHARD T. KELLY, WYANDOTTE, MICH., MAY 8, 1951

Resolved by the City Council of the City of Wyandotte:

Whereas this council, in a resolution of April 10, 1951, relative to dredging operations of the United States Army, Corps of Engineers, in the Rouge River, has evidently created an erroneous impression, said impression being that the city of Wyandotte concurred with the present disposal methods of dredged materials at the head of Fighting Island, and

Whereas this definitely is not the purpose of said resolution, and this council, therefore, on May 7, 1951, rescinded its resolution of April 10, 1951, and

Whereas, in the interest of protecting the public water supply for the city of Wyandotte, this council stands on the following principles:

1. That the Detroit River, as a source of our public water supply, must follow the orderly procedure of lawful uses of boundary waters, as outlined by the International Joint Commission.

2. That the present disposal methods of the dredging operations of the Rouge River by the United States Army, Corps of Engineers, constitutes the dumping of contaminated material in the Detroit River, thus resulting in a concentration of pollution in a critical section of the river.

3. That an unnecessary and inexcusable public health hazard to our water supply does exist, as a result of the disposal methods at the head of Fighting Island, and of dredging operations in the Rouge River.

4. In support of our contentions, the following data are attached and made part of this resolution:

(*a*) The resolution of the State of Michigan Water Resources Commission, of January 23, 1951, relative to the disposal of dredged material in the Detroit River by the United States Corps of Engineers.

(*b*) The report of the city of Wyandotte Municipal Service Commission, which is responsible for operations concerning the city water supply.

Therefore, be it

Resolved, That the Congress of the United States is hereby petitioned to provide the additional appropriations necessary to enable the War Department, United States Army Corps of Engineers, to immediately remove the public health hazard now existing to the city of Wyandotte public water supply, as a result of the present disposal methods of dredging operations in the Rouge River; be it further

Resolved, That copies of this resolution be sent to the President of the United States, chairman of the Public Works Committee of the House of Representatives, chairman of the Public Works Committee of the Senate, Michigan's representatives in Congress and other interested agencies.

I move the adoption of the foregoing resolution.

Councilman Kelly.

Supported by Councilman McEachran.

Yeas: Councilmen Bloomfield, Brohl, Copeland, Haynes, Kelly, McEachran.

Nays: None.

It must be admitted by all that the conservation of public health is of paramount importance.

The city of Wyandotte obtains its raw water supply from the Detroit River, which is a boundary water under the jurisdiction of the International Joint Commission. As such, the lawful uses of this boundary water follow an orderly procedure which shall be observed, and no use shall be permitted which tends materially to conflict with or restrain any other use which is given preference over it in the following order of procedure:

1. Uses for domestic and sanitary purposes.
2. Uses for navigation.
3. Uses for power and irrigation purposes.

It is therefore obvious that the city of Wyandotte, as a riparian user, and by virtue of public rights, is entitled to all available means of protection for its water supply for use by the general public.

It is evident that the Rouge River has been looked upon as an open sewer for the reception of pollution of all kinds. The records of various State and Federal agencies show that the deposits in the Rouge River are highly polluted by sewage and industrial wastes. To further permit this pollution to continue, is a complete disregard for the downstream communities, and certainly does not follow the orderly procedure of lawful uses indicated by the International Joint Commission.

The United States Army Engineers Corps is responsible for maintaining the Rouge River in a navigable condition. This is done by means of yearly dredging operations. Between yearly dredging operations, the Rouge River collects deposits, highly polluted by sewage and industrial wastes. Then along comes the United States Army Engineers Corps to maintain navigation. In so doing, they nicely become an absolutely nonexpense disposal system for those originally responsible for the pollution. Apparently, the Army engineers are not concerned with the type of dredged material they handle. They certainly are aware of its potency, as they have a copy of the survey made by the International Joint Commission technical staff during 1948 as to the actual qualities and quantities of pollution they handled. So they conveniently use an approved dumping ground, so located as to keep dredging costs at a minimum, and which acts as a dispersing medium to distribute the pollution and dredged material among downstream communities.

On June 17, 1947, we made a complete check of a dumping operation. Complete data is attached, including our comments.

On September 11, 1947, Mr. Hayse H. Black, officer in charge, of the International Joint Commission boundary water pollution investigation, Detroit, Mich., requested data on plant operations at Wyandotte. This data was to cover operations from September 1, 1946, to September 1, 1947. It was stated that this data was to be used in conjunction with dredging operations started May 26, 1947. The International Joint Commission technical staff observations were made in July and August 1947. The attached data show our objection to making a comparison of single dredging operations against the entire project, especially when the time of observations was at the 50 percent completion point of the project. It is certain that such observations cannot establish a criteria of the over-all problem.

On December 29, 1947, we received a letter from the district engineer, Detroit district, Corps of Engineers, requesting information as to the general effects of the annual dredging operations on our water supply. Our response was that due to the highly polluted condition of the river normally, it would involve a comprehensive set-up to distinguish the portion of pollution that could be attributed to their respective sources.

Their letter of December 29 also indicated that they had never received any word from the city of Wyandotte relative to the effects of dredging operations on our water supply. Our records show file numbers of letters forwarded as early as August 10, 1944, and also indicated a record of a personal visit on August 13, 1944, by a representative of their office, to discuss this problem.

On January 13, 1948, a letter received from the former stream control commission at Lansing stated that the Army Engineers Corps office at Detroit had never received any proof of injury from Wyandotte concerning its public water supply, as a result of dredging operations and disposal methods. At this time, these disposal methods were called an additional and unnecessary public health hazard and we asked how this hazard could be measured so as to constitute proof of injury. We have yet to find out. We also asked if data was available as proof of noninjury as a result of such operations.

During the months of June, July, and August of 1948, a special study was made of dredging operations in order to indicate the results of dumping operations, as a contribution to pollution in the lower Detroit River. The investigations, under conditions existing at the time of study, reported no great degradation in river water quality.

At this point, we would like to point out that this study was made when the river water temperatures were at a maximum and, therefore, would not indicate a true picture of the concentration originally existing, and also that this study would not be indicative of water quality changes that could occur at lower temperatures.

To support this contention, the dredging operations of the Rouge River for 1950 commenced on December 1, 1950, and ended as of February 2, 1951. Certainly, one cannot accept the theory that no great degradation of water quality occurred, if based on surveys made at maximum water temperatures when the actual operations were made at minimum temperatures occurring in the Detroit River. Plant operating data indicate difficulties appearing in the raw water qualities in conjunction with the dredging operations.

The Army engineers are apparently concerned only with the responsibility of maintaining navigation in the Rouge River. It is interesting to note that the city of Wyandotte operates its water treatment plant in accordance with the United States Public Health Service drinking water standards, which were revised and adopted in 1946.

The Army engineers, we understand, are still operating dredging practices under laws enacted in 1899.

State agencies are attempting to effect compliance in order to reduce pollution in the Detroit River. The Army engineers, in continuing to maintain present disposal practices at the head of Fighting Island, most certainly do not lend any moral support, but, to the contrary, have and are creating a stumbling block for those who daily take note of their method of pollution disposal at the head of Fighting Island. To insist that a continuance of this practice is morally correct would indicate that a review of governing policies is sorely needed.

We might add that since July 1946 we have only received one advance notice from the Army engineers that dredging operations of the Rouge River would begin at a given date. This tends to indicate that they were not greatly concerned over the problem of downstream users. Fortunately, our plant pro-

cedures served us well in guarding against these sudden and unforewarned changes in raw water quality.

The final report of the International Joint Commission, issued in 1950, indicate that, as a result of the dredging operations of the Rouge River, the dumping of contaminated material in the Detroit River resulted in a concentration of pollution in a critical section of the river.

This report also indicated and recommended that such dredged material should be disposed of in such a manner and at such a location as will not result in harmful transfer of polluting substances in the water under reference. They also indicate that the above recommendations are both reasonable and desirable.

In our opinion, the above recommendations indicate that a public-health hazard to our water supply does exist, as a result of the dumping of Rouge River dredged materials at the head of Fighting Island.

The Army engineers contend that limited funds do not permit the changing of the disposal point of the Rouge River dredgings. It therefore becomes imperative that those who are responsible for the allocation of such funds give immediate and serious thought to correct this serious situation.

The Army engineers, while aware that the deposits handled during dredging operations are highly polluted by sewage and industrial wastes, apparently show no concern over creating a public-health hazard to the Wyandotte water supply and, in so doing, evidently assume no responsibility.

It is to be noted that when private projects require the disposal of dredged materials the Corps of Engineers does not permit them to use the Fighting Island location, and so routes them elsewhere.

The solids which are removed from the river bed of the Rouge River are from sources of sewage and industrial wastes. Would not the presence of these materials indicate a violation of the provisions contained in the Rivers and Harbors Act, for which the Federal Government itself is responsible for enforcement?

The city of Wyandotte, for a great number of years, has borne a greater share of over-all gross pollution and increased purification costs than any other community in the area, and through no fault of its own. Its riparian and public rights have been under cover too long. And after spending $200,000 for a new raw-water source, it still found its supply affected by Rouge River dredging operations.

It's high time that all parties assume responsibility for their respective share of pollution. And, on this basis, we must insist that enforcing agencies, at all levels of government, take immediate steps to correct this condition of pollution of public water supplies.

We again reaffirm our stand that no public-health hazard should be permitted to exist in public water supplies. Where costs are used as a basis to permit the continuance of such practices, we emphatically state that it is folly to attempt to evaluate a public-health hazard in terms of dollars and cents.

RESOLUTION BY COUNCILMAN LINUS J. BLOOMFIELD, WYANDOTTE, MICH., JUNE 26, 1951

Resolved, by the City Council of the City of Wyandotte, That the communications and reports received and read at the Wyandotte Council Committee of the Whole meeting Monday, June 18, 1951, regarding dredging of the River Rouge and the pollution of the water at the head of Fighting Island, are hereby received and ordered transmitted to the municipal service commission.

The report of C. H. Chorpening, brigadier general, United States Army, conveying the conclusions of the Corps of Engineers in this matter, is deemed an unsatisfactory explanation so far as this community is concerned. This council does hereby place itself on record as urging our representatives in Washington to provide the necessary funds to deposit the dredged materials in a location which does not endanger the health of any of the communities on the Detroit River.

Further the water-resources commission is urged to exert every effort to enlist the full cooperation of all industries and municipalities discharging pollution in the River Rouge to expedite the elimination of this contributing factor.

The city clerk is directed to send certified copies of this resolution to the President of the United States, Senators Ferguson and Moody, Representative Lesinski, and the Honorable Charles A. Buckley, and to the water-resources commission.

I move the adoption of the foregoing resolution.

(Councilman Linus J. Bloomfield supported by Councilman Kelly.)

THREE PHASES TO DREDGING OF ROUGE RIVER, MICH.

Senator FERGUSON. Now, as I see it, there are three phases to the problem. First is the question of the long-range solution. The Corps of Engineers has correctly pointed out that the long-range answer is the elimination of pollution in the Rouge River, and that is being done. It will be completed, or nearly so, by the end of 1953. But what we are concerned with is what is to be done in the meantime.

Now, the second point is whether or not the operation of the Corps of Engineers in their dredging and in their dumping at the present point constitutes a hazard to the city of Wyandotte's water supply.

I suggested that the witnesses from Wyandotte direct themselves to that question, and they have done so in letter and memorandum which is being supplied to the committee.

The third point is based upon the proposition that the operation of the Corps of Engineers is a hazard to the water supply at Wyandotte and elsewhere on the Detroit River. If that is so, the question is whether or not they should be obliged to alter their practice. I think they should considering the responsibility to observe the ordinary procedures of the International Joint Commission, since this is boundary water, and Executive Order 10014, issued November 5, 1948, directs all Federal agencies to cooperate with local authorities in preventing the pollution of surface and underground water.

Now, if the committee will permit me to do so, I would like to call Mr. Hazey as a witness, to present the situation in further detail.

Chairman MCKELLAR. All right, Mr. Hazey.

Senator FERGUSON. Mr. Hazey, if you will come forward, we will make this just as short as possible.

Mr. Hazey, you are in charge of the question of pure water; are you not? Will you show the Senators how, after they dump this material at the head of Fighting Island, it increases the pollution in the Detroit River, and will you explain also how it is practically impossible to tell from hour to hour when this pollution gets into the water? Will you also explain the fact that you changed your intake, placing it further out into the river, by virtue of the engineers' permit?

STATEMENT OF GEORGE HAZEY, CHIEF OPERATOR, WATER-FILTRATION PLANT, WYANDOTTE, MICH.

DREDGING OPERATIONS IN ROUGE RIVER, MICH.

Mr. HAZEY. Yes, sir. Thank you, Senator.

Chairman McKellar and members of the committee, on behalf of the citizens of Wyandotte, I would like to state our objections to the present practice of the Corps of Engineers in dumping the dredged material from the Rouge River at the head of Fighting Island, and its resulting effect on the raw water supplied for the city of Wyandotte.

Senator CORDON. How far is Fighting Island from Wyandotte?

Mr. HAZEY. The head of Fighting Island is approximately 3 miles distant.

Senator CORDON. Let me ask you one other question: How far is the mouth of the Rogue River from Wyandotte?

Mr. HAZEY. About 5 miles, I believe.

Senator CORDON. In other words, the city water supply would not be affected adversely if the Engineers did no clearing of the channel?

Mr. HAZEY. I concur in that. There would be no dumped material there to affect it.

Senator CORDON. Where would the solid matter in the river go to in the event it remained in the river?

Mr. HAZEY. Some of it would, no doubt, be light enough to float off and would travel into the Detroit River and go downstream. That part of it which would be heavy enough would remain. That is why you have to dredge the river—to keep it open for navigation.

Senator CORDON. How long have the Engineers been engaged in this operation?

Mr. HAZEY. I can't say for certain. My experience in Wyandotte has been limited to the last 5 years.

Senator CORDON. They have been engaged in it for that whole period?

Mr. HAZEY. Yes, sir.

Senator FERGUSON. Mr. Rausch, the other witness, will probably be able to state that.

POLLUTION OF RIVER

Senator THYE. Is it the dumping that is polluting the water or is it the stirring up of the silt by the dredging that is polluting the water?

Mr. HAZEY. I would say both, but the greater hazard is from the dumping operations.

Senator FERGUSON. Mr. Hazey, will you show the members of the committee the chart that you have and show them what happened in December, when they started to dredge and dump, as far as the necessity of using chlorine in the water is concerned?

Mr. HAZEY. I would like to first apologize to the committee. Because of the shortness of time, I did not have an opportunity to make individual charts.

The thing we are concerned with, and the big hazard in the water-treatment plant, is the fact that something occurs, after which you do not know when it will occur or to what extent it will occur.

If I may present this graph for your observation, this is a graph plotted from the amount of chlorine required to adequately treat 1,000,000 gallons of water.

Senator THYE. Over a period of how long?

Mr. HAZEY. From the period of December 1 to December 13. This lower line is the chlorine demand of the water on December 1, prior to the commencement of the dredging operations in the Rouge River.

This high point that you see here occurred on December 2, at which time the chlorine demand went from 20 pounds per million gallons of water to 50 pounds per million gallons of water, all of a sudden.

These are the things that create the hazard to the water supply, because they upset the normal water-treatment plan.

Science has developed water-purification processes to normally treat the pollution that water may have, but certainly they are not designed to take care of something like this that has occurred.

Senator CORDON. Right beyond the highest point, where 50 pounds of chlorine were used to 1,000,000 gallons of water, you have a short rise. What does that represent?

Mr. HAZEY. That is one thing we cannot say with certainty, not knowing when the dumping occurred. We do not know whether the dumping of the dredge at that particular point was the same or not.

Senator FERGUSON. But they did start in December, when this great rise in the chlorine occurred, when they first started to dump it?

EFFECT OF DREDGING OPERATIONS ON PURITY OF WATER

Mr. HAZEY. That is right. When that occurred, our immediate reaction was to notify the local office of the Michigan Water Resources Board, and the sanitary engineer who was in charge of the office was quite familiar with the industrial and municipal pollution of the area. He began to check in an effort to help us locate the source. The only thing that he could find out of the ordinary was the commencement of the dredging operations in the Rouge River.

Incidentally, we received no advance notice of the commencement of the dredging operations.

Senator CORDON. If you had received a notice, would that have made any difference to you?

Mr. HAZEY. It would have forewarned us of the commencement, but it would not have eliminated this hazard.

Even if we knew that the dredging operations were going on, it would not have stopped this type of thing from occurring, of course.

Senator CORDON. Now, coming to the second one there, what is that?

Mr. HAZEY. This falls in line with the dredging operations of the raw water.

Senator CORDON. Is the lower level of the use of chlorine when there was no action by the Corps of Engineers?

Mr. HAZEY. No; I would not say that. Here it is prior to the commencement of the dredging operations. Here we are unable to say with certainty whether the actual dredging operations at the dump were in such position that it might have bypassed the intake location. We don't know what quantity might have been dumped. There is no way you can tell that. What we do know is the fact that the material is handled in the dredging operations—that the materials were highly contaminated industrial waste and sewage. They present a hazard in tying up our treatment process.

Senator CORDON. From the information you have, to what do you ascribe the second high point of necessity for added chlorination?

Mr. HAZEY. To repeat the statement I made before, we cannot definitely say whether the peak was due to the dredging operation of dumping the material there, because we don't know when they dumped it, or what hour they dumped it.

Senator CORDON. Have you attempted to determine whether they were dumping at that time or not?

Mr. HAZEY. As far as we know, the operations were in progress in the Rouge River. Now, with the amount of material that is being handled and with the water flowing in the Detroit River, you cannot, by simply going out into the river and taking samples, say whether that was one load or another. You would have to take into consideration the wind direction, flows, and the stream velocities. It would be pretty hard to state.

Senator CORDON. What has been your experience over the years? Have you had any high point of contamination, so far as you know, when there was no dumping, or have you had a reasonable level of contamination?

NEW RAW WATER INTAKE

Mr. HAZEY. In that respect, may I state that on July 21, 1950, a new raw water intake was placed into service.

Senator CORDON. In 1950?

Mr. HAZEY. That is right.

Prior to that time the only information on the water supply for the city of Wyandotte indicated a low chlorine demand.

The Water Resources Commission, which we understand has considerable information on the water and pollution in the Detroit River, cannot say with certainty that there is anything above us coming down the ship channel that should increase the chlorine demand of the water.

Senator ELLENDER. Is not that all fresh water around there?

Mr. HAZEY. There is no salt water.

Senator ELLENDER. Where does it come from? How does the chlorine get into the stream?

Mr. HAZEY. I do not get your question, Senator.

Senator ELLENDER. How does it find its way into that stream?

Mr. HAZEY. That is coming from the dumping operations of the Corps of Engineers' dredging of this river.

Senator ELLENDER. I know, but where do they get it from? If the water that they are pumping is not salt water, where does the chlorine come from?

Mr. HAZEY. We are adding chlorine to treat the water for a public drinking supply.

Senator CORDON. That is what has to be added to make it safe to drink.

Senator ELLENDER. I understood there was chlorine in it.

Senator CORDON. What he said was that when they had contamination, they had to add chlorine in their decontamination plant in order to make the water usable.

Mr. HAZEY. Senator, with further reference to your question, asking about the pollution of the water at our intake source, the Water Resources Commission of Michigan, as well as the International Joint Commission and its technical staff, has had a survey completed in 1948 which stated that the water in that area is relatively unpolluted. Certainly, with a chlorine demand of 50 pounds per million gallons of water, regardless of its source, that water cannot be classed as relatively unpolluted.

Senator MCCLELLAN. What is the amount of chlorine that you had been adding the year previous?

Senator CORDON. Let us get some information on that. Where was the old intake with reference to the new one, and why did you make the change? It seems to me that your new intake is giving you a bigger problem than your old one did.

OLD WATER INTAKE

Mr. HAZEY. If I may take the time to make the statement, the old intake was located 1,000 feet from the American shore.

Senator CORDON. Out into the lake?

Mr. HAZEY. Out into the Detroit River. It was on an angle approximating 1,400 feet of pipeline, about 1,000 feet from the American shore. The pipeline was subject to vessels dragging their anchors, and it was broken, so that the actual source was approximately 800 feet from the shore.

In the interests of getting a better water supply, we constructed a new one 1,800 feet from shore. To be exact, I believe the pipe led to a point 1,760 feet from the shore. The location was approved by the Michigan Department of Health and was constructed under a permit from the Corps of Engineers.

The water was of fairly good quality. We would have liked to have had it better, but we thought that with the International Joint Commission having spent 2½ years making a survey of the problem in the interests of the abatement of pollution, our intake source would become better as the pollution decreased upstream.

Now, we couldn't find a better place. Previous to that we had contemplated sinking a shaft down in bedrock clear across the ship channel, coming up in Canadian waters. In fact, we had gone to the point of getting a permit.

LOCATION OF DETROIT RIVER

Senator CORDON. Will you describe the location of the Detroit River?

Senator FERGUSON. It flows between Lake St. Clair and Lake Erie, going past Detroit. There is a solid industrial community along the shore.

Senator CORDON. Is it the contact between the two lakes?

Senator FERGUSON. Yes. Between Lake St. Clair and Lake Erie. Referring to this map—this is Lake St. Clair. This gray portion is Detroit, and Wyandotte is right below it. This red line coming down into Lake Erie is the Detroit River. It is the main connecting strait of Lake St. Clair and Lake Erie.

Senator GORDON. What is the width of the Detroit River in the neighborhood of the place where your intake goes out?

Mr. HAZEY. I can't say with certainty.

Senator FERGUSON. I would say it was about a mile, would you not?

Mr. HAZEY. It is more than a mile. Water distances are deceiving. I can't say.

Senator GORDON. Does your 1,760 intake pipe reach the main ship channel or is it on the American side of the ship channel?

Mr. HAZEY. It is on the American side. We have cut a new channel through what is known as the Middle Grounds, approximately 1,100 feet from the American shore. The easterly bank of the ship channel is approximately 3,000 feet from the American shore. That would be over the international boundary, toward the Canadian side.

Senator CORDON. You say that the new intake has only been operating since 1950?

Mr. HAZEY. That is right.

Senator CORDON. Prior to that, when you were using the 800-foot or 1,000-foot intake and while the Corps of Engineers was continuing its operation of dredging in the Rouge River and dumping, what was the condition of the water taken in through the shorter intake with reference to contamination?

Mr. HAZEY. The intake, 800 feet from shore, the original intake, was in what was classed as a zone of heavy pollution in the Detroit River. With the amount of pollution there, the municipalities and the industries, it was a considerable problem to identify whether it was originally caused by industries, municipalities, or perhaps the operations of the Corps of Engineers.

CHLORINE CONTENT OF WATER

Senator CORDON. Let us translate that into the use of chlorine, because we have used that as a measure already. How many pounds of chlorine per million gallons of water did you have to use when you used the water obtained through the shorter intake?

Mr. HAZEY. When we used the water from the shorter intake, we were subject to fluctuations in pollution, which, from my experience in the last 5 years, has gone anywhere from 20 pounds to as high as 100 pounds per million gallons of water.

Senator THYE. But the chart you have shown us indicates a maximum of 50 pounds?

Mr. HAZEY. That is right. That is from the new intake source.

Senator THYE. Pardon me, Senator Cordon, for asking this question: Did you extend your new pipe at the approximately same location in the river, or did you go up or down the shore of the river there?

Mr. HAZEY. The new intake is 1,000 feet out into the river farther than the old one and 600 feet south.

Senator THYE. That is what I was getting at. You went south 600 feet, but you went farther out into the river. What I was concerned with was the 600 feet distance that you went farther south from the location of your old pipe. Now then, did you get closer to the dump or the point where the heavy deposits came from the plants?

Mr. HAZEY. Yes, I would say we did.

Senator THYE. In other words, when you move south, you go closer to the actual pollution of the water from the plants?

Mr. HAZEY. No, not from the plants. I was thinking you were referring to the dumping of the dredged material. We got farther away from the plants.

Senator THYE. You got farther away, but so far as the dredge unloading its loads is concerned, your new intake was closer to that point.

Mr. HAZEY. We were closer, because our intake source now is directly in the main ship channel which carries the load of the dredged material.

Senator THYE. I am sorry for the interruption.

Senator CORDON. That is all right.

You testified that you went from 20 pounds to 100 pounds of chlorine when you had your shorter intake and that there was no question but that that variation was due to the differing degree of contamination from local plants. You are reasonably certain of that?

Mr. HAZEY. I would say to a certain degree. I cannot say positively. As I stated before, Wyandotte is situated in an area where we are accumulating all of the pollution. I might state this: The cost of treating relatively unpolluted water, I might say, water practically without pollution, was $1.75 for the total chemical cost for treating 1,000,000 gallons of water. That was true at the old intake. From that amount we have gone as high as $7.20 to treat 1,000,000 gallons of water. We have dropped to $4.25 at the new intake. But, with the conditions that exist, we must use treatment to control taste and odors and to maintain chlorine in the distribution system in excess, because we don't know what is coming. That is one thing we are very much concerned about.

Senator CORDON. I am wondering whether you have any information, or whether there is any way of getting information as to whether this excessive contamination which was shown on the chart, with reference to the new intake might result from the localized contamination by the plants in the area rather than from the added contamination resulting from the dredging by the Corps of Engineers. Has there been any study of that?

Mr. HAZEY. Not to my knowledge.

May I summarize for a minute?

Senator CORDON. Surely.

PROTEST AT DUMPING DREDGING SEDIMENT

Mr. HAZEY. First, the Water Resources Commission, which is the pollution control agency for the State of Michigan, has been accumulating data on that river for some time. By a resolution, dated October 27, 1947, they protested against the dumping of this material at the head of Fighting Island. In 1947, we were using our old intake, and they protested because that was carrying pollution and contaminated material south into a relatively unpolluted area.

Senator FERGUSON. Will you explain how they dump this stuff into the river?

Mr. HAZEY. I will explain that to you from actual observation of my own. We were out in the river with a boat observing it. They come down out of the Rouge River, and as they approach the head of Fighting Island, they make a U-turn. In making the U-turn, my understanding is—I can't say exactly—that they dump the entire contents of this hopper dredge, so that the material is dumped at the head of Fighting Island and spreads out into the ship channel. That progresses down the river.

Senator FERGUSON. How far is the site of that dumping from your intake?

Mr. HAZEY. I would say approximately 3 miles.

Senator FERGUSON. And your intake is somewhat farther out into the river, so that this contamination would be carried over your intake?

Mr. HAZEY. I wouldn't say that it would be carried over the intake. It would be carried into the water leading to it.

Senator FERGUSON. Now, what you are worried about and concerned about, as I understand it, is that if a heavily contaminated load were dumped, you would not have any notice and therefore there might be hours when the water would be consumed with a low content

of purification and you would not know about it, whereas, if you knew it was coming, you might be able to protect yourselves?

CAPACITY OF TREATMENT PLANTS

Mr. HAZEY. We could protect ourselves, providing the amount of pollution was within the range of our treatment plants.

Senator THYE. Is it not true that the water that is taken for city use is automatically and mechanically checked? You do not stand there and add the chlorine just as it is required? It is mechanically checked, is it not? Otherwise, how could you determine what is required by way of chlorine?

Mr. HAZEY. Let me say that at our plant, the Wyandotte plant, there is a check made every hour of the residual chlorine, that is, the amount of chlorine that has been applied to the water, the amount that has been lost in treating the water to a point that we call the break point of chlorination, leaving some in as a safety factor. It is that safety factor that we are concerned about.

Now, 2 years ago, we put an automatic chlorine measuring device into use.

Senator THYE. That is what I was getting at.

Mr. HAZEY. Wyandotte, incidentally, happens to be the first city where that type of machine was ever used on raw water. It was installed because of these things that occur.

You must remember that any mechanical device is subject to failure, and we cannot entirely rely on this mechanical device.

Senator FERGUSON. So you do make a separate check every hour?

Mr. HAZEY. Absolutely—and oftener if we know about or notice any change in the concentration. Incidentally, our operators are under instructions to record any change in the amount of chlorine that is placed in the water regardless of the cause, and that is the source of the information we show on the graph. We know at all times of the day exactly how much chlorine is required to give us the required safety factor.

Senator CORDON. I have one other question. Is Fighting Island on the same side of the ship channel as your intake, or is it on the opposite side?

Mr. HAZEY. It is on the opposite side.

WIDTH OF SHIP CHANNEL

Senator CORDON. How wide would you say the ship channel is?

Mr. HAZEY. I believe that the western boundary is 2,000 feet from the American shore and I believe the Canadian side is about 4,000 feet—it would be approximately 2,000 feet. I may be in error on that.

Senator CORDON. Is there a current there?

Mr. HAZEY. I understand that there is a current, based on information obtained in 1948, of about 1½ to 2 miles an hour.

Senator CORDON. How far above your intake is the dumping area of the Corps of Engineers?

Mr. HAZEY. Approximately 3 miles.

Senator ELLENDER. What does the Corps of Engineers add to the water to contaminate it, if anything? Is it not merely mud from the bottom?

Mr. HAZEY. It is more than mud, sir.

Senator ELLENDER. I mean that it is substance taken from the river?

Mr. HAZEY. That is right.

Senator ELLENDER. Why do you folks not prevent this dumping of this material which causes this contamination? It is within the State of Michigan, is it not?

Mr. HAZEY. Yes. We are a municipality within the State of Michigan, but we, as a municipality have no jurisdiction.

Senator ELLENDER. But the State would?

Mr. HAZEY. We have referred this matter to the legal water pollution control agency of the State, which is the water resources commission, calling attention to the upsets that we have had in our water treatment plant. They are the legal agency, and, as such, they have the control over pollution, and not the city of Wyandotte.

FORD MOTOR CO. PURIFICATION PLANT

Senator FERGUSON. I might say that the Ford Motor Co. is putting in a purification plant which will cost a couple of million dollars, but they will not have that finished for a year or so. In the meantime we want to get the Federal Government to dump this material that comes out of the Ford plant and from the sewers along the river which accumulates in the river bed, we just want them to take that 8 miles further into the head of the lake, where there is a dumping ground that won't contaminate any water.

Senator CORDON. What is the fact, Senator, relative to anything that is done by sewage disposal plants, in addition to the decontamination efforts of the Ford Motor Co.?

Senator FERGUSON. I am not sure what is being done on those storm sewers. Do you know, Mr. Hazey?

Mr. HAZEY. The city of Detroit, which contributes considerable there, I believe, has finished advertising bonds.

Senator CORDON. Maybe this will save our going through a lengthy statement:

Is there any assurance at the present time that the plans that have now been completed with respect to taking care of the pollution in the river will result in completion of the work necessary to do that so that we could be reasonably sure that by the end of 1953 the dumping, if it were continued at Fighting Island, would not adversely affect you? If that is the case, then all we have to do is to say that the problem—if it is a problem, is a problem that the Corps of Engineers can handle for the years of 1951, 1952, and 1953, which is a different question.

POLLUTION ABATEMENT

Mr. HAZEY. I cannot say myself with certainty, without contacting the water resources commission. Let me put it this way: They have as of this date, relative to pollution abatement in the Rouge River, either corrected the conditions, or have issued orders to those violators of pollution or have obtained commitments which would mean, at their completion, that the river should be in a condition to meet the requirements of the water resources commission from the standpoint of a satisfactory pollution abatement problem.

Senator FERGUSON. And therefore the dumping of this refuse in the future years would not affect your intake?

Mr. HAZEY. I would assume so, Senator, under those conditions. If they met the water resources commission's requirements, that would be true.

Senator MCCLELLAN. Is this project before the Senate Appropriations Committee for which you are asking us to appropriate money, or what are you expecting the Federal Government to do here?

Senator FERGUSON. To have the Corps of Engineers dump the refuse 8 miles further down the river. They say that there is not enough money in the appropriation bill for them to go that distance of 8 miles. That is the thing. They would be glad to drop it there if they could get the money to go the 8 miles.

Senator ECTON. May I ask why you want them to haul it 8 miles when your intake is only 3 miles below the dredging operation?

INCREASED DREDGING COSTS OF NEW DUMPING AREA

Mr. HAZEY. Because they have located a place down there which they call the Lake Erie dumping grounds. Then it would not interfere with anybody else's intake along the river. That is outside the Detroit River, right at the head of Lake Erie.

Senator MCCLELLAN. Let us find out how much extra it would cost.

Senator FERGUSON. The Engineers say that it would be the difference between $225,000 and $75,000 if they go out that distance.

Is that correct, General?

General CHORPENING. That is correct, sir.

Senator MCCLELLAN. In other words it would cost $150,000 more?

Senator FERGUSON. I cannot see why it would cost that much more to take the dredge down the river and dump it at that point.

Senator MCCLELLAN. I guess it would depend on how many trips they would make.

Senator FERGUSON. I do not know.

Senator MCCLELLAN. This is a little bit of a unique problem for the Appropriations Committee.

Senator FERGUSON. Yes; but it is all a matter of appropriations.

Mr. HAZEY. I might say something further, Mr. Chairman, if I may. We are talking about pollution. We are talking about protecting the water supply, and we are asking that the Corps of Engineers be given assistance so as to get this dredged material out of the way so it does not become a public health hazard. The city of Wyandotte is supplying water to 40,000 people, plus its transients. At the present time, in addition to the 40,000 people, we are supplying water to approximately 8,000 people in our neighboring community of Lincoln Park, because their present water supply, which is from Detroit, is insufficient to give them an adequate water pressure. They are doing some repairing, and they are severely restricted in the use of water at the present time.

Also, we have been approved by the Chrysler Corp., which is contemplating building a plant south of us at Trenton, a distance of about 4 miles, where they are intending to employ about 6,000 to 8,000 people. Populationwise, using a base of 3.2, it would probably mean 18,000 to 19,000 additional citizens.

Senator FERGUSON. That is a defense plant for engines, is it not?

Mr. HAZEY. That is right.

Senator FERGUSON. It would be solely a defense plant?

ADDITIONAL WATER SUPPLIES NEEDED

Mr. HAZEY. The metropolitan area surrounding Wyandotte is sadly in need of additional water supplies. They are unable to get the water they need. They are severely restricted during the summer months.

We are here asking to be permitted to supply a safe water supply, safe against some of these hazards which we are up against.

Senator THYE. Is the dredging operation constant during all of the open summer months, or is it done at certain seasons of the year?

Mr. HAZEY. That is one of the things which we object to, sir. My experience has been in the past that it has been an annual summer dredging operation. This time it occurred in December, which changed conditions. There are two factors which are mighty important in defense of this thing.

1948 POLLUTION SURVEY

In 1948 a survey was submitted to show the major factors of change. (1) The temperature and (2) is the change of location of the intake. The Corps of Engineers have no objections to declining responsibility for extending pollution in a relatively unpolluted area, when in 1948—and we say this because that is the only survey that we have information on—they handled approximately 467,500 cubic yards of liquor and solids, highly polluted with sewage and industrial wastes, from the Rouge River, and dumped it at the head of Fighting Island, which dispersed it into the Detroit River which was relatively unpolluted. Yet, by the same token, the city of Wyandotte had about 77 homes discharging raw sewage into the river. The city of Wyandotte was politely admonished by the Water Resources Commission of Michigan that while our sewage treatment was about 99 percent completed, we should have it 100 percent so. We agreed with them. Pollution abatement is pollution abatement. We have at the present time about 50 percent of that project completed, averaging about 40 homes at a cost of $40,000, or an average of about $1,000 per property owner, and that is being done to eliminate a small portion of sewage going into the already polluted shore line of the Detroit River.

Senator THYE. What would be the cost if you went clear across and took your water off the Canadian side or drew your water from the Canadian side?

Mr. HAZEY. That we cannot say. We do not know the condition of the water over there.

Why should we go into Canadian waters? Why can we not remain in our own?

Senator THYE. I am just asking you that question because you have mentioned the fact of possibly taking it from the Canadian side and I was raising the question as to whether it would be cheaper to obtain some assistance in laying a pipe over to the Canadian side where the condition of the water might be better. You might be able to lay a pipe to the Canadian side for less money than it would take to pay for this additional hauling for 1 year, and you would have

solved your problem without the reoccurrence of this expense of making it necessary for the dredge to travel this additional distance. I am merely going into the question of what would be the most economical way of doing it.

Mr. HAZEY. When the decision was made to discuss an intake going over into the Canadian waters, that involved sinking a shaft down to bedrock in order to clear the ship channel, and to then provide an adequate means of transmitting the water from the Canadian side. The total cost of that project was estimated at $2,500,000.

When this new intake was discussed, the intake location was approved by the Michigan Department of Health, and at that time the International Joint Commission, as I stated, gave their approval from the standpoint of pollution abatement. Why should we have to spend our $2,500,000 because of pollution for which we are not responsible?

Senator THYE. My question was just merely to get the facts into the record so that we would know that it wouldn't be feasible to do that.

Senator HAYDEN. Have you about completed your statement?

Senator FERGUSON. I think that about covers it.

Senator HAYDEN. Do you have another witness?

Senator FERGUSON. We have another, but Mr. Hazey has covered the subject quite well, and this second witness would probably go over the same thing.

Senator HAYDEN. It might be well to ask the Corps of Engineers to respond and tell us what the situation is there.

DESIGNATED DUMPING GROUNDS FOR DREDGING OPERATIONS

General CHORPENING. The situation is about this: We have been dredging in this location for many, many years, and we have been dumping in specified disposal areas.

Senator HAYDEN. Is the justification for that dredging the improvement of navigation?

General CHORPENING. That is in connection with the maintenance of an authorized navigation project which has been there for some 40 or 50 years.

Senator FERGUSON. And it is essential?

General CHORPENING. Yes. The question gets back to this. In figuring the funds required for maintenance this year, we did not contemplate taking this material any further than the designated dumping ground that has been talked about.

Senator CORDON. How far is that? What is the transportation distance to the present dumping area?

General CHORPENING. It is somewhere between 3 miles and 5 miles.

Senator CORDON. How much further is it to the point that is mentioned here, the Lake Erie dumping area?

General CHORPENING. It would be about 8 miles further to get it out into the lake to the point where there would be no contamination of any other community there. You see, there are other communities along the river, and if we went some place else other than where we are presently dumping, why, somebody else would object.

Senator CORDON. In other words, to dispose of the material which is dredged from the river, you have to transport it 3 miles and dump it?

General CHORPENING. Yes, sir.

Senator CORDON. And on the basis of having already dredged it and having put it on board for transportation purposes, you would have to go 8 miles farther?

General CHORPENING. Yes, sir; about 8 miles farther.

AMOUNT OF ADDITIONAL COST TO DISPOSE DREDGED MATERIAL TO NEW SITE

Senator CORDON. And would it cost you three times as much to go that distance, 8 miles farther, as it does to go the 3 miles, when you have already dredged the material and put it on board?

General CHORPENING. We estimate it would cost $150,000 in addition.

Senator CORDON. You say that it costs $75,000 to dredge it and take it three miles and dump it?

General CHORPENING. There is the time involved moving a dredge and the dredge crew, which comes pretty high, the loss of time of the actual dredging and all that, sir.

Now, I have not personally reviewed the estimate. If we can do it for less, sir, I certainly want to do that. That is the figure we came up with.

The engineers submitted the following information with respect to the dumping of material. The travel time to and from the present dumping ground, 3½ miles distant, is .8 hour and time required for dumping is 1 hour. The travel time to the Lake Erie dumping ground, 24 miles distant, is 5.3 hours with 1 hour for dumping. Consequently, the elapsed time involved in using the present dumping ground is 1.8 hours compared to 6.3 hours to the Lake Erie dumping ground.

Senator HAYDEN. It would seem to me that what would be required, in the first place, would be more barges?

General CHORPENING. No, sir, because we are operating this dredge continuously. This is a hopper dredge. The dredge is filled up, you see, and the dredge is moved out to dump its load. It then returns for another load.

Senator HAYDEN. Then you don't put the material into barges, do you?

General CHORPENING. No, sir.

Senator HAYDEN. Then the time when the dredge is not used is completely lost, so far as dredging is concerned, as you have a crew that is not doing anything?

General CHORPENING. Except riding up and down the river; that is right.

Senator MCCLELLAN. Are you thoroughly satisfied that it is the dredging which is causing the additional pollution at this point?

General CHORPENING. I cannot make that statement.

Senator MCCLELLAN. Is there a scientific way to determine that?

General CHORPENING. I think so.

Senator FERGUSON. I think this chart compared to their dumping activities would probably show it.

Senator ELLENDER. But, Senator, they continued their dumping and it went down again. That is what I cannot understand.

General CHORPENING. I am inclined to think that it is somewhat responsible, but I cannot make that positive statement.

Senator McCLELLAN. Well, I am just asking for information. Should not that be determined before we go to another $150,000 expense?

Senator HAYDEN. Let me ask this: What is the source of the material that you take out of the Rouge River?

SILT FROM DISCHARGE OF MANUFACTURING PLANTS

General CHORPENING. The river fills up with material which I suppose is brought down from small streams carrying the discharge out of factories. I do not know the things involved: That is a large, busy harbor, and channel, and we are required to dredge it in order to maintain it at the project depth.

Senator FERGUSON. Much of it comes out of the Ford Motor Co. plant, does it not?

General CHORPENING. I think a lot of it comes out of the Ford Motor Co. plant.

Senator FERGUSON. As I said, they are going to install a $2,000,000 plant to avoid that.

Senator HAYDEN. Is this dredging a continuous operation or do you carry it on for part of the year and then come back?

General CHORPENING. The dredge is operated in many other locations around the Great Lakes. We operate in this particular harbor, I would say, about 30 to 45 days in the summer. Occasionally we may have to come in again if there is any particular shoaling that requires action, to keep the harbor open. It is a busy harbor and a very essential one.

Senator CORDON. Apparently you dredged it in midwinter because this is dated December 1, 1950, and December 2, 1950, when they got their highest contamination.

Senator HAYDEN. Well, the witness stated that ordinarily they did their dredging in the summer.

General CHORPENING. We did do a little last winter. That was a rather unusual thing. I don't recall exactly why we went in there but normally it is a summer operation.

Senator CORDON. You do not have a chart other than this one, do you?

Mr. HAZEY. We had such short notice that I did not have an opportunity to make more of them.

Senator CORDON. Does this exhibit indicate the kind of effect you have at all of these dumping periods? Do you know that?

Mr. HAZEY. That I cannot say, because, as I mentioned before——

Senator CORDON. We need more information than we have. This might be the reason for your contamination and it might not.

Mr. HAZEY. Senator, may I make this statement——

INFORMATION ON DREDGING OPERATIONS TO BE FURNISHED COMMITTEE

Senator CORDON. Let me interrupt you, please: Could you furnish to the committee, within the next week, like data with respect to periods which the Corps of Engineers, at our direction, would furnish you, the periods during which they continued their dredging operations, so that we could have a check as to the effect of those dumpings on your water supply?

Senator FERGUSON. We will furnish that to you after we get the dates of the dumpings. We will give you the information on the chlorine contents just as we have it here in this chart. We knew that they started the dumping about the second of December, and we furnished the information for that period.

Senator THYE. Mr. Chairman, why would it not be well to take a reading, for instance, in the middle of the winter, when you know that there was no dredging?

Senator FERGUSON. We will get you the figures for a month when their data shows that they weren't doing any dredging.

Senator THYE. You see, you have a chart showing the daily contamination for the 12 months, and I take it you have the readings for the year through for the water.

Senator FERGUSON. We will furnish you information for a period when they were not dredging.

Senator CORDON. Why not take the continuous period since you opened your new intake and just give us the chlorine content and then we can check that with the dumping periods?

Senator FERGUSON. All right; we will do that.

(The information had not been supplied at the time the hearings were concluded.)

Senator ECTON. Mr. Chairman, may I ask the general a question, with regard to these dredgings? I do not know much about them, I will admit.

Would it not be more practicable to have a dredge located in the river there permanently, or during the season when you operate, and then transport this debris on barges?

I have in mind the fact that when we build roads, we haul the gravel and sand and dirt and dump them in the road. We don't pick the shovel up and take them down while we are dumping the gravel and so on.

General CHORPENING. To give you a proper answer on that, Senator, would take me into a dissertation on dredges.

Senator ECTON. I am willing to admit that I do not know a thing about it.

TYPES OF DREDGES USED

General CHORPENING. We have pipeline dredges that we use in certain instances where the nature of the dredging required will permit the dredge remaining there and pumping fairly close. Otherwise, where we may be at a location for 3 weeks or 4 weeks during the year, and that is all we have, it is better to use a hopper dredge. This would be a 3-mile dumping distance, at the very least, and it might mean more. So that the dredge, after finishing the work here, will proceed to some other harbor where it can be used. Now, hopper dredges are used in various parts of the country, in New York Harbor, for instance; we move around there to various places.

Senator THYE. You may operate over a distance of 5 or 6 miles that you dredge and clean the channel, and you may run into a sand bar some place, and you will remove that sand bar so that it will not interfere with navigation?

General CHORPENING. In a harbor that is already built, you may have to take 3 or 4 feet off the bottom. Obviously, if you had to go down and run a pipeline that would be very difficult because you would have to add pipe all the time. That makes it difficult to use pipeline dredges.

INCREASE IN CHLORINE CONTENT

Senator FERGUSON. Mr. Chairman, I would like to put into the record a memorandum showing that in December 1950, when we started to dredge, the chlorine use went from 2,337 in November to 3,172 in December, while in January it went to 3,661. I will put this entire chart into the record.

Chairman MCKELLAR. Without objection, it is so ordered.

(The chart referred to is as follows:)

Data taken from operating records of city of Wyandotte filtration plant

	Pounds chlorine used	Gallons water pumpage	Pounds chlorine usage		Temperature of raw river water entering plant		
			More	Less	Maximum	Minimum	Average
1950—October	2,817	152,317,000			66	55	60
November	2,337	140,956,000		480	58	36	47
December	3,172	142,572,000	835		40	34	37
1951—January	3,661	143,985,000	489		38	34	36
February	3,269	131,816,000		392	37	34	35
March	3,069	141,610,000		200	38	35	36

Chairman MCKELLAR. Senator, may I ask you one other question: What would it cost to do this work, all told?

Senator FERGUSON. They claim $150,000 a year to take this sediment 8 miles farther down the river, to rather, 5 miles farther down the river. Mr. Hazey says it is 5 miles farther than the point they are dumping it now. It is hauled 3 miles now and they want to take it a total of 8 miles, which is 5 miles more.

Chairman MCKELLAR. All right, sir.

Senator FERGUSON. We will supply the data you have requested as soon as we get that.

Mr. HAZEY. Thank you, Chairman McKellar and members of the committee.

GREAT LAKES SURVEYS

Senator FERGUSON. Mr. Chairman, I have a statement for the record with respect to the surveys of northern and northwestern lakes—I will not bother to read the statement, but, if I may, I would like to place it in the record in order that the committee may make reference to it when it comes to further consideration of the appropriation item: "Current expenses of Corps of Engineers."

(The statement referred to appears on p. 1627.)

STATEMENT OF HON. OSCAR L. CHAPMAN, SECRETARY OF THE INTERIOR

RIVERS AND HARBORS AND FLOOD-CONTROL PROJECTS

Chairman MCKELLAR. Secretary Chapman, the committee will be pleased to hear from you, sir.

Secretary CHAPMAN. Mr. Chairman and members of the committee.

First I want to thank you for this opportunity of appearing before the committee.

Chairman McKELLAR. We are glad to have you.

Secretary CHAPMAN. This is my first opportunity to appear before the Civil Functions Committee to discuss the matters that are before you.

DEFENSE PROGRAM

The reason I have been interested in coming before this committee is that I feel the things you are considering here for the Corps of Engineers are so vital and so important to our general defense program as well as to our general civilian program, that I felt that I might be able to make some contribution by showing what the need is in the field in which the Department operates in relation to the Corps of Engineers.

I am one of those who have a sense of appreciation for what the Corps of Engineers has been doing, and I feel that they have some fine projects that I would like very much to see considered.

Then needless to say, the devastating flood in the Midwest dramatizes beyond words the need for positive, immediate action to protect lives and property. These floods are similar to the serious flood that occurred in the Columbia River Valley in 1948, which could have been prevented had the program of multiple purpose projects been carried forward as originally scheduled.

That flood also caused loss of lives and damage to property running into millions of dollars. Many of the dams to be built to curb floodwaters are so-called multiple-purpose dams, are constructed in such a way as to provide for the production of electric power, navigation, irrigation, and recreational facilities.

I wish to emphasize that such dams, although built with Government funds, are eventually paid for with interest by the people receiving the benefits of the dams.

As you know, the Department of the Interior is responsible for the conservation and development of this country's natural resources. We also have primary responsibilities among Government agencies for the Nation's power supply. The Department markets all Federal power generated outside the Tennessee Valley Authority.

Chairman McKELLAR. Let me ask you this, Mr. Secretary: Do these other agencies pay moneys into the Treasury each month, or just how do they pay it?

Secretary CHAPMAN. It is paid annually, I think, into the Treasury.

Chairman McKELLAR. Annually?

Secretary CHAPMAN. I think they pay it annually.

Chairman McKELLAR. Would you be good enough to have your secretary check into how it is paid and then insert that information in the record?

(The information requested is as follows:)

Receipts from the sale of Federal power are based on monthly billings to customers. These receipts are deposited in the special fund account of the Treasury by certificates of deposit when collections are made, and are transferred to the general fund not less frequently than annually. The portion of receipts from the sale of Grand Coulee power by Bonneville Power Administration are earmarked for the reclamation fund and are deposited in the special fund account and transferred periodically to the Bureau of Reclamation for deposit in the receipts account, reclamation fund, special fund.

Payments for irrigation water are usually computed on an annual basis and depending on the repayment contract may be payable annually, semiannually, and, in a few instances, monthly. These receipts are deposited in the receipts account,

reclamation fund, special fund, of the Treasury by certificates of deposit when the collections are made.

Receipts going into the reclamation fund from both power and irrigation operations are not available for expenditure until appropriated by the Congress for reclamation purposes.

Secretary CHAPMAN. Yes, sir; I will be glad to do so. That was put into the record of the appropriations hearings in regard to those projects. I will be glad to furnish that detail for you.

Chairman MCKELLAR. Do you mean that the receipts from power are paid into the Treasury annually?

Secretary CHAPMAN. Yes, sir.

Chairman MCKELLAR. The receipts from the water that you sell to the municipalities for irrigation purposes?

Secretary CHAPMAN. That is correct.

Chairman MCKELLAR. And that is an annual payment?

Secretary CHAPMAN. I think it is annual. I am not certain of that, but I will check into that to be sure. The moneys are paid, I am certain, not more than annually—I mean, not a longer period than that. But whether it is semiannually or annually, I am not sure.

Chairman MCKELLAR. The Tennessee Valley Authority is the only Government institution of that kind which does not pay its receipts into the Treasury of the United States; is that not true?

POWER RECEIPTS FROM BONNEVILLE POWER ADMINISTRATION

Secretary CHAPMAN. Well, last year we paid from the Bonneville Power Administration—and I am just speaking from memory now—approximately $33,000,000 into the Treasury of the United States.

Chairman MCKELLAR. Now, I am going to say this. I come from Tennessee, and I am, of course, a great believer in the Tennessee Valley. These gentlemen here helped to build these dams down there.

I want to say that I think that concern ought to pay its receipts into the Treasury of the United States. We are not a system of bureaus—yet.

Senator MCCLELLAN. Mr. Chairman, some of us voted with you on that issue in the past.

Chairman MCKELLAR. I know you have, and I hope you are going to continue to do so in the future.

Secretary CHAPMAN. Senator, I was making the point that so many people, I feel, are misled or are misinformed on the question of flood-control dams, as just something built as a "pork barrel" proposition.

Chairman MCKELLAR. Yes, sir.

Secretary CHAPMAN. If they only understood the values or what they mean in terms of real cash value to the people not only in the community, but to the people all over the United States, I am sure they would not make such statements.

Chairman MCKELLAR. Yes, sir.

Secretary CHAPMAN. You cannot have a vast area of the United States like the Kansas and Missouri River Basins in flood without affecting the economy of the whole United States. We are all a part of one whole country, and we have to strengthen its economy in every one of its segments.

Now, that is why I feel very deeply about these flood-control dams. Naturally, the responsibility under the law has been given to the Department to sell the power that is generated from those dams.

Not all of those dams will generate power, but as to those that do, we do sell the power.

Senator McCLELLAN. They say that there has been a billion dollars of loss as a result of that flood. Is not all of that loss deductible from income-tax returns this year?

Secretary CHAPMAN. I would assume it to be.

Senator McCLELLAN. So that the $25,000,000 that the Government loses for relief is not the only loss, but there is also the revenue that would have come into the Treasury?

Secretary CHAPMAN. I know that it is far better to have a statement read for continuity in the record, but sometimes an issue comes up that is so important that I think it is desirable to try to clarify it by statements.

Chairman McKELLAR. I will tell you what we will do. If you do not mind, we will let your statement go into the record, and then you can just talk to us and tell us what you want us to know about it.

(The statement referred to is as follows:)

The Defense Electric Power Administration, under my supervision, is responsible for the adequate provision of power supply—both public and private.

We are seriously concerned with the dire consequences which would result if the action of the House of Representatives on projects containing electric-power facilities in the civil-functions appropriations were to prevail.

That would seriously impair our capacity to meet critical defense-production goals. In addition, farmers' electric co-ops, other preference customers, and in many cases private power companies, would be deprived of power required for essential civilian needs.

Electric power is a vital element in the defense-mobilization program. A little over a year ago—in April 1950—it was estimated that the total-maximum demand of class I utilities by December 1953 would amount to approximately 70 million kilowatts. It is now estimated that the 1951 maximum loads will amount to 69 million kilowatts—almost as much as was estimated a year ago for 1953. It is also estimated that the maximum December 1952 loads will be 9 million kilowatts over the estimates for that year which were made just a year ago.

Because of these increases, all of the major utility systems in the country stepped up their programs for the installation of additional electric-production capacity. If this program can be maintained, it is believed that with one or two exceptions power supply in most parts of the country will be such that presently anticipated defense loads can be carried without serious trouble, although reserve margins will be far below desirable levels in most regions.

That means that it is imperative that all scheduled power-production facilities, both Federal and non-Federal, be brought into production as planned if essential requirements are to be met.

With that background, I want to state that the cuts made by the House of Representatives on the power items in the civil-functions appropriations, if allowed to stand, will seriously impair our capacity to meet critical defense-production goals.

The reduction in funds for projects in the Pacific Northwest, will create the most critical shortages involving defense-production requirements. Today and for the next few years that area is and will be desperately short of power, even though within the last decade it has had the largest increase in power capacity in the country.

I wish to stress that electric power is the energy base in the Pacific Northwest. It has no coal, oil, or gas resources. A major part of the aluminum and other light metals on which the success of our defense effort depends is produced in the Pacific Northwest. The Bonneville Power Administration, the Bureau of Reclamation, the Corps of Engineers, the private utilities, the municipalities, and the public-utility districts have worked cooperatively to develop a generation schedule geared to the defense effort for the region to meet known demands.

Elimination of funds for new construction, and for maintaining the normal schedule of projects now under construction, will disrupt that generation schedule and will thereby produce a serious effect on defense-production goals as well as upon the economy of the Pacific Northwest. In this region there is wide support

by all segments of the population for the program of development of the Columbia River and its tributaries by the Federal Government.

The situation in the Southeast is almost as serious. It is the second most critical area of power shortage in the Nation. I ask that you give careful heed to the serious effects of the House action on corps projects in that region.

The President has repeatedly pointed out the need for the strengthening of our economy as a requirement of the long-range mobilization program. The power plants scheduled for this fiscal year in the Corps of Engineers program throughout the country are essential to our economic strength. Failure to meet these demands will inevitably weaken our economy.

In planning and scheduling the marketing facilities at Federal hydroelectric plants, the Department has tried to coordinate all Federal plants with respect to each other and with all privately owned plants, so that an orderly, economical power-marketing program can be carried out. The specific projects under construction have been carefully selected as part of the comprehensive plans of development already approved by Congress.

All of these are multiple-purpose projects, relating to flood control, navigation, and power. The various hydro facilities involved in the operation of a river system are planned, designed, and built so as to operate as one system. Thus we get greater benefits than if projects were planned and operated on an independent basis.

The Federal power projects are or will be integrated and interconnected in many instances with the generating plants and transmission systems of non-Federal public projects and privately owned utilities.

Despite the electric utility industry's power-construction program, it is recognized that a tight power-supply situation will prevail during the next several years. A strong upward trend in power utilization by industry and other consumers will continue in the indefinite future.

Based upon these observations, I will discuss briefly the effects of the House action as it pertains to each area in which serious power-supply problems will result from the House action on the civil-functions appropriations bill.

PACIFIC NORTHWEST

Reductions made by the House of Representatives in appropriation requests for corps projects in the Pacific Northwest will prolong and intensify the critical power situation that now exists there. This is the consensus of opinion of all companies and individuals who operate power systems in the Pacific Northwest.

A short time ago representatives of the private utility companies, public distributing agencies including public utility districts, municipalities, and cooperatives testified before this committee as to the seriousness of the power situation and the need for appropriations to start or to continue construction on the projects that were contained in the President's budget for fiscal year 1952. They were joined in this testimony by Senators and Congressmen from all of the Pacific Northwest States. In this testimony there was unanimity of opinion regarding the urgent need for these power projects. It was also emphasized that the Government has a public-utility responsibility in this area which it must fulfill and that this responsibility cannot be met if money is not made available to provide for an orderly schedule of reservoir-project construction to meet the needs of the area.

Funds were reduced for McNary Dam, which will result in 1 year's delay. Aside from the serious impact of this delay on the regional economy and on the defense effort, revenue irrevocably lost over this 1-year period would nearly equal the $6,900,000 by which the appropriation was reduced.

Funds were eliminated for Albeni Falls Dam, which is already under construction. This dam is most important because of its water storage, which can be made available very quickly to provide, initially, 110,000 kilowatts of additional firm capacity of downstream plants.

The action of the House as regards Detroit and Big Cliff will delay these projects by 6 months. Furthermore, funds for Dexter Dam were completely denied. This will actually prevent power production at Lookout Point, because the regulating dam at Dexter is a critical part of the power set-up at Lookout Point.

Funds to start Ice Harbor and The Dalles Dams were completely eliminated. The fish and Indian problems related to these projects were cited as the reasons. Both of these problems can be solved. It is believed that any harm done the fish industry by the construction of these dams will be offset by the development of increased salmon resources through the lower Columbia River fisheries program.

Unquestionably, Indian rights at The Dalles project site must be respected, but the matter of compensation to the Indian tribes for use of their hereditary fishing grounds can be negotiated while the project is being built.

These projects will have an installed name-plate capacity aggregating 1,240,000 kilowatts of firm power. This power must come into production as scheduled if the area is to avoid the most serious consequences.

Ice Harbor Dam can be brought into operation by 1955 and The Dalles by 1956. Until then, the power producing agencies will be serving, on an interruptible basis, more than 500,000 kilowatts of industrial power important to the national defense. If minimum water conditions develop, certain industries being supplied with such interruptible power would be shut down, the Nation would lose important strategic materials, the regional economy would be set back, and unemployment would result.

THE SOUTHEAST AREA

Power supply in this region will be very tight and at the end of 1951, even with power being brought in from the north, the situation will be critical—especially if poor water conditions prevail.

The House action would delay the needed power from Jim Woodruff Dam by 6 months, from Clark Hill by 3 months, and would delay indefinitely the completion of the Buford project. These projects aggregate 396,000 kilowatts of initial installed capacity. Old Hickory Dam, of 100,000 kilowatts initial generating capacity, planned to be under construction during fiscal year 1952, would be indefinitely delayed.

Apart from the regional need for completion of the projects without delay, there are specific commitments for power deliveries which can be supported only by strict adherence to the construction schedule.

In the large western area exclusive of the Pacific Northwest, the House action will delay the Folsom and Garrison projects by 1 year, will delay the Fort Randall project about 7 months, and will indefinitely delay the Gavins Point and Oahe projects. The initial installed generating capacity of these projects is 1,150,000 kilowatts.

The 1-year delay in the Folsom project will disrupt the plans for a feasible rate of development of Folsom Dam and power plant so as to have initial power available by July 1954. The dam is under construction, materials have been placed under contract by the Bureau of Reclamation for the power facilities, and the work should be continued as scheduled.

This is especially important for the conservation of fuel. On December 31, 1946, only 34 percent of the total generating capacity in this area was in fuel plants. During the period 1947–50, 69 percent of the added generating capacity was in fuel plants, and 79 percent of the new generating capacity scheduled for installation during the years 1951–54 is in fuel plants. It is presently estimated that fuel plants will constitute 55 percent of the total generating capacity in the area by the end of 1954.

What this means is that the estimated requirement for 1951 is the equivalent of 31.9 million barrels of fuel oil. If 1954 is an average water year, the estimated requirement then will be the equivalent of 46.3 million barrels, and if 1954 is as dry as 1931 was, the requirement will be the equivalent of 58.8 million barrels. The risk of increased dependence of an adequate fuel supply for the coastal area of California is not, in my judgment, warranted.

Installed capacity of the Gavins Point project will be 100,000 kilowatts, and it will produce 51,000 kilowatts of firm power. Gavins Point is more important as an afterbay for the Fort Randall plant, since it will be used to reregulate the flow of the Missouri River below Fort Randall and thereby permit the latter plant to produce 314,000 kilowatts of firm power. Without Gavins Point, only 132,000 kilowatts of firm power can be produced at Fort Randall. Thus the net gain of the Gavins Point project is 233,000 kilowatts, and it will add an estimated $3,500,000 of annual revenues to the Federal power system.

There is an immediate market for this 233,000 kilowatts of firm power which Gavins Point will make possible. The Federal transmission system, together with the existing lines of private and public power systems, will enable power to be sold in a wide area comprising North and South Dakota, most of Nebraska, and western Minnesota and Iowa.

Any delay in the completion of Fort Randall most seriously threatens the plans for meeting the power-shortage problem in South Dakota. It is very urgent that the power plant be completed at the earliest possible date.

The Oahe power plant, while not scheduled for initial operation until 1959, will need to be built on schedule in order to meet the further estimated load

growth in the five-State area. This plant will help to meet a good part of the power requirements of both public and private systems operating in that area. Without the construction of Oahe it is improbable that federally generated power will be available in any substantial amounts to private companies or to permit any large industrial developments in the area after 1960.

RESTORATION OF REDUCTIONS MADE BY THE HOUSE

Since the expansion of defense production and the essential needs of our civilian economy will be adversely affected by a slow-down in the hydro-power development of the Corps of Engineers, the appropriation cuts made by the House of Representatives in the budget for the Corps' power projects should be restored. We should not be delayed in providing sorely needed power for industries and homes throughout the country in the critical years ahead. Certainly this is no time to retard the great developments in the West, Southwest, and Southeast, when such power will be completely absorbed in the loads in the area.

Each dam will begin making its contribution to our defense effort the day it is available for power generation. Any reduction in appropriation which will delay this contribution cannot be justified upon the grounds either that the need does not exist or that it is not essential to our defense effort. I urge that the Senate restore and that the Congress approve the appropriations necessary to speed our vital power-development program.

As Secretary of the Department responsible for the Nation's power supply, I want to state most emphatically that suspension or retarding of these projects will not serve the national interest or security.

PICK-SLOAN PLAN

Senator ECTON. I would like to ask the Secretary a question. Have you made an estimate, Mr. Secretary, of the amount of money that would be required annually to be appropriated by the Congress, in order to commence and carry on until completion all of the various projects that have been planned and designed under the Pick-Sloan arrangement that we are all naturally interested in? It seems to me, Mr. Chairman, that we come in here and we take these projects up individually, whereas we should have an annual appropriation to carry all of them along uniformly. I had just wondered if you had ever made an estimate of what that appropriation would be?

TOTAL COST OF PROJECTS

Secretary CHAPMAN. I do not have the figures, Senator, as to what appropriation would be required for the Corps of Engineers. Speaking from memory only, I think that the Reclamation Service would require approximately $300,000,000 annually for the completion of its part of the program that they have assumed.

Senator ECTON. That is what I am getting at.

Secretary CHAPMAN. Now I am not asking that you appropriate $300,000,000 a year for these projects. First, it takes time to plan, develop and coordinate such projects into one program.

Chairman MCKELLAR. And there are so many differences in situations. Some are multiple-purpose dams, while others are not. There are so many differences of that kind that I doubt whether a general plan of that sort could be worked out. I believe it would be better for the Government—and it would be more economical for the Government to proceed in the way we are proceeding in, because we get the facts every year, anyway.

Secretary CHAPMAN. You do get the facts every year, Senator.

There is one thing that I would like to add to that—I feel that there ought to be more starts planned and begun, so as to actually

have more dams built as we go along, in order to get a better coordinated plan on the total river basin program.

Chairman McKellar. I agree with you entirely.

Secretary Chapman. You see so much argument these days, and discussion about what we ought to call it. Some refer to it as the Pick-Sloan plan. Some of us refer to it as some other departmental plan, while some refer to it as the MVA. Now, here is the thing that concerns me mostly—while we are spending so much time on the differences of opinion about what the top echelon authority should be to control or manage these projects we are permitting great sums to go to waste. We are letting the substance slip away from us while we are arguing about a purely technical question of where it should be managed or controlled at the top.

I must say that frankly I favor an MVA program for complete development but it has to have variation. While we are working this thing out in the democratic process and allowing the people of the various States to express themselves and become informed of what the problem is, we ought to ourselves assume some leadership and responsibility by going forward with the things about which we do have information, and which we believe would make a contribution toward stopping these disastrous floods that occur periodically.

When the problem is handled as I outline I do not get too concerned about the delay on an MVA, although I would like to see such a program. I think that principle with variations, would fit the Missouri Basin.

You cannot, as I said, simply take a pattern of one river plan and apply it to another plan and expect it to fit. There must be variations in order to make it fit. The political structure and the desires of the people in the area are among the things which must be considered.

UNDERSTANDING OF PEOPLE NEEDED

I believe that when the people of the Missouri River Basin fully understand the whole program, all the projects that are being presented by the Corps of Engineers, as well as by the Bureau of Reclamation, they will begin to understand that a coordinated plan is essential to efficient management of the total program of the river.

Those are the things that I feel are important. I hope I have not imposed on the committee by expressing my views.

Chairman McKellar. To the contrary, we are glad to have them.

I just want to call your attention to a statement made by General Pick, I believe, last Friday, a week ago. That was the day before the flood was reported at Kansas City.

We had two delegations from the upper part of the Kansas River. One was strongly for a dam known as Tuttle Creek Dam and two adjacent or nearby dams, with General Pick testifying, if they had been built, they would have absolutely saved Kansas City from this flood.

Yet the local people living in one of the valleys, if not all three of them, did not want to give up their homes. That is perfectly natural —I can understand that. There is no doubt about it that a man who lives in his home for a long time does not want to give it up. They created so much trouble in Northern Kansas over the building of these dams that they were not built.

Now, I believe the next morning was the morning when General Pick was called to Kansas City—or it may have been that night—and it was the next morning that the flood was announced. I believe that a majority of those people who wanted to build little reservoirs all around the mountains, some distance off, and not on their lands, were convinced that they ought to have followed the Government's advice in the building of these dams.

I agree with you that there ought to be some authority on the Missouri River, by all means, to coordinate these dams and build them for the benefit of all the people. It is a terrible thing to take away a man's home by the right of eminent domain, but there ought to be some way of getting together and functioning all alike.

Secretary CHAPMAN. That is right, Senator. I agree so very thoroughly with what you say. I would like to add one further expression.

As much as I believe in the Pick-Sloan plan I do not think it is the sole answer. It is a partial answer, however, and the most important answer we have been able to produce, as of the moment.

Chairman MCKELLAR. Yes; it is the best we have had before us so far.

IMPLEMENTATION OF SOIL CONSERVATION PROGRAM AND PICK-SLOAN PROGRAM

Secretary CHAPMAN. I believe you should add to that, the soil conservation programs, which are also very essential. I have long been favorable toward the idea of building small headwater dams, and yet the big dams should be built. I believe they have to be built to properly control the flood problem.

Senator MCCLELLAN. Do you think the small ones should be built first?

Secretary CHAPMAN. Not necessarily first, but they should be coordinated in time, according to the time and available money.

Senator MCCLELLAN. I thought you were speaking about the Pick-Sloan plan and the projects now authorized and approved under that plan. You certainly could have no system of flood control or water resources development without the essentials of the Pick-Sloan plan. The other implements it. When you go back up and build these small dams, that implements it.

Secretary CHAPMAN. That is exactly what I am talking about. You have to implement the Pick-Sloan plan with the essential things that carry out a fully rounded program. You just do not have one factor as being the only factor involved in such a tremendous, complex job as the Missouri Basin.

Senator MCCLELLAN. Therefore, I think the large ones—I mean as you have your plans now on the Missouri River—should be constructed first, to get the benefit of the power and everything else, that is, the country develops, and you are able to go back then into the reaches of the watershed and construct the other dams to control the silt and so forth.

Secretary CHAPMAN. Now, apropos of what the chairman said a moment ago about what General Pick testified we have presented—and when I say "we" I mean the administration, the Corps of Engineers

have presented, and I think ably so, to the committees of Congress certain numbers of dams around the Northwest, which they feel ought to be built. They fit in and are as essential to flood-control problems of the Northwest as these dams around Kansas City and in that area fit into the Missouri Basin program.

Now, instead of reading my statement, I am going to talk about those just briefly, if I may.

ICE HARBOR DAM, WASH.

First we come to Ice Harbor Dam. I know that some people have not favored Ice Harbor. Let me explain to you that I have had a very difficult time, as coordinating administrator of two or three separate bureaus that have different points of view to arrive at a decision. These agencies have different responsibilities in the Department, such as the Fish and Wildlife Service, which has the responsibility of protecting the fish, which I want to do. Then I have the responsibility of another agency of my Department, known as Defense Electric Power Administration, which has the responsibility of making certain that we have power at certain places to meet the demands of the military and defense requirements.

Having those two factors, at times I am faced with a conflicting point of view. There are some times there is no way to resolve them adequately, or you do not have the time to gather all of the information you need to solve those problems to your own satisfaction.

As I say, some people have objected to Ice Harbor. I have come to the firm conviction that Ice Harbor ought to be built. I feel that the greatest value could be accomplished by building Ice Harbor as contrasted with any other problem involved in relation to Ice Harbor.

Senator HAYDEN. By the "fish" you refer to the——

Secretary CHAPMAN. I refer to the commercial salmon.

Senator HAYDEN. That is, the run of the fish in the river?

Secretary CHAPMAN. Yes, sir; this is a commercial fish program.

Senator MCCLELLAN. Do you also have conflicts between the Reclamation Service and the Power Interests?

Secretary CHAPMAN. Do you mean the private power interests?

Senator MCCLELLAN. I mean the public power interests.

Secretary CHAPMAN. Not necessarily conflicts, Senator. When you have an active, energetic staff, you are going to obviously have each one working energetically on its own program, and at times they will emphasize what they want to push, and then you will find the other staff feeling that the emphasis ought to be on some particular phase other than that which the first staff emphasizes. I have to resolve those differences quite often.

FLOOD CONTROL AND POWER

Senator MCCLELLAN. You are pretty well able to resolve the differences as between the matter of flood control and power in the lower regions?

Secretary CHAPMAN. Generally, that is a simple one. As between them, you feel confident at least that you have made the right decision when you get through. These others are close questions. But I have made a considerable study of Ice Harbor, and I feel that that dam ought to be built.

POWER CAPACITY OF ICE HARBOR PROJECT, WASHINGTON

I was going to give you some figures on that. Now, this reservoir is planned to have an initial capacity of three 65,000-kilowatt units, with an ultimate capacity of four 65,000-kilowatt units, or a total capacity of 260,000 kilowatts.

It is estimated to cost $95,899,000. Of that amount $1,132,600 is for planning only, and has been appropriated to date.

Now, I just mention that to give you the broad figure of what is involved in that kind of a project, and the program we are working on.

Now, we need the kilowatts. We need the power in the area. We need the flood control benefits and security and safety that that dam would carry with it. We need that first. Now then, we start to talk about the auxiliary benefits which are the kilowatts we are talking about. Let me go to another conflicting problem which is on my mind, and that is the Bureau of Indian Affairs also in my Department.

THE DALLES DAM, OREG.

That involves The Dalles—The Dalles program. It has a fish problem as well as an Indian problem, because it will flood some Indian lands. I think I have made sufficient inquiry and study to determine, in my own mind, that so far as the Indian problem is concerned, we can settle it. We can get that adequately settled to their interest, so that they will not be deprived of any values they have coming. If I did not think so, I would not have recommended this project at all.

But I am convinced that these things can be settled, and I think this project by all means ought to be built.

POWER CAPACITY

The Dalles Reservoir will contain 14 70,000-kilowatt units having a total capacity of 980,000 kilowatts, with an estimated construction cost of $326,000,000.

To date $800,000 for planning only, has been appropriated. I mention that because that is how much the Corps of Engineers has had to work with.

Senator McCLELLAN. Mr. Secretary, at that point, could you tell us the basis of those two dams? You have mentioned one producing 260,000 kilowatts, with the other one producing 900,000. The first is to be built at a cost of, let us say, $100,000,000 in round numbers, while the second one is to be built at a cost of what amount, did you say?

TOTAL COST

Secretary CHAPMAN. $326,000,000.

Senator McCLELLAN. I would like to know how long it would take for the power proceeds alone to pay the cost of the project.

Secretary CHAPMAN. Well, at first, you would not assess all of the costs to power.

Senator McCLELLAN. I know you do not assess it, but I want to know, assuming the present market value of power, how long it would take to repay the cost?

Secretary CHAPMAN. Senator, I would have to check that and give you a very careful estimate as to how long it would take the revenues, at the rate we charge in that area, to pay for the cost of that sized dam, the total cost.

Senator MCCLELLAN. The point I am making is that ordinarily, in these projects, the proceeds from the power alone will ultimately pay out the cost of the project.

Secretary CHAPMAN. There is no question about that.

Senator MCCLELLAN. That is before the life of the project is over.

Secretary CHAPMAN. That is the point. Let me say this; let me employ this term: That the proceeds of the electric power from this project during the useful life of the project will pay for the project.

Senator MCCLELLAN. That is the point I was trying to make.

Senator ELLENDER. You mean the entire cost?

Secretary CHAPMAN. The entire cost.

Senator MCCLELLAN. That is the point I was trying to make.

Secretary CHAPMAN. If you apply it along the whole range of the useful life of the project, it will pay the entire cost.

Senator ELLENDER. You might get a better reception from Congress if you could get the project to pay itself out; that is, get the electric energy to pay for anything.

Senator CORDON. That would be the only case in the United States where navigation benefits have been returned in cash.

Secretary CHAPMAN. That is right.

Senator ELLENDER. I might say that Congress would probably go along much more quickly than if you divided it up as you have done in the past.

Secretary CHAPMAN. Well, as a matter of fact, if you take the flood-control features that you have charged against the dams in the Columbia Basin, we don't receive any revenues for anything except the irrigation water we may use for acreage on lands and the kilowatts. But, obviously, when we turned $33,000,000 last year into the Treasury of the United States, if you keep continuing that for the useful life of the project you will recover every dime you have ever spent in terms of direct money paid into the Treasury of the United States.

Senator MCCLELLAN. That may not be true of every flood-control or multiple-purpose project that we build, but it is true of many of them.

"PORK BARRELING" DISCUSSED

Secretary CHAPMAN. I cannot think of a single one that has a power unit attached to it, if properly administered, that will not pay its entire cost over the useful life of the entire project—and I believe it will do it.

Senator MCCLELLAN. That is something we ought to make the country understand to refute this charge of "pork barreling" all the time.

Secretary CHAPMAN. That is the thing we sometimes get discouraged about. We hear of words and phrases used which blanket out the real facts you are trying to get across there to the people.

Chairman MCKELLAR. May I interrupt for just a minute?

Secretary CHAPMAN. Yes.

BONNEVILLE DAM, WASH.

Chairman McKellar. Now, what was the dam that brought in the $33,000,000?

Secretary Chapman. You are referring to the revenues that were brought in by the Columbia Valley Authority, the Bonneville Power Authority, I mean.

Chairman McKellar. The Bonneville Power Authority?

Secretary Chapman. Yes, Mr. Chairman. That covers the Columbia Basin.

Chairman McKellar. Now, what did it cost to build Bonneville?

Secretary Chapman. Senator, I have forgotten what it cost. It must have been $200,000,000.

Chairman McKellar. General, can you tell us?

Secretary Chapman. The Corps of Engineers built it.

General Chorpening. We are looking that up, Senator.

(The cost of Bonneville Dam was $84,046,000, exclusive of transmission lines.)

Secretary Chapman. We have those figures. Will you include Grand Coulee also, please?

Senator Cordon. As far as Bonneville is concerned, however, Mr. Secretary, your records, I think, will show that it has not only met the annual payments which were necessary to retire the principal and interest allocated to power but it has already provided a great surplus running into millions of dollars in the Treasury over and above the necessary annual payments.

Secretary Chapman. I don't have the figures in mind, but there are several millions of dollars.

Chairman McKellar. That is what I wanted to get the figures on and have them put into the record.

Secretary Chapman. We have those figures, and they are available.

Senator Ellender. That is a good argument for what I suggested awhile ago.

Secretary Chapman. Exactly.

Senator Ellender. If there is reserve power to pay for the entire project, Congress might look with greater favor on these others.

Secretary Chapman. I think you will have to have a careful analysis made of these projects, where power units are attached to them, to get the useful life of the project as the principle established. I think they will pay for themselves in direct revenues back into the Treasury.

Now, with that you are also expanding the tax base of the community from which you are drawing taxes in addition to getting your revenues back.

Senator McClellan. You do that in flood control, because you protect the area and cause it to be developed.

Chairman McKellar. In addition to that, in my part of the country these dams have caused country people to use more power, probably twice as much power as they ever used before in their history. They are making their homes more comfortable. Their food is better. All that is by reason of the use of electricity. It has been a wonderful bonus to our part of the country.

REA COOPERATIVES

Secretary CHAPMAN. I think the Rural Electrification Administration program has been one of the greatest advances made during the last decade. It has been one of the greatest advantage for farm people.

SALT RIVER PROJECT

Senator HAYDEN. With respect to taxes, Mr. Secretary, as the Secretary has mentioned, as far as the Treasury of the United States is concerned, the return in taxes derived from new wealth created by these projects means the quickest way of getting the money back into the Treasury. I know of many instances of that. I can cite one where I live, where the Federal Government spent $22,000,000 on the Salt River project and developed an irrigated area there. We collect out of that area $65,000,000 paid into the Treasury every year. We pay for it every year.

BOULDER DAM

The total cost of Boulder Dam, which sent the power into the Los Angeles area and resulted in that great industrial development there, has returned to the Treasury every year its $175,000,000. If you will look at how much money was paid to the collector of internal revenue before that dam was built and that power sent into the area and the amount that is being paid him now, you will find that the project has been paid for practically every year.

Secretary CHAPMAN. That is right. That could be multiplied by every project that has been developed by Reclamation, with which I happen to be a little more familiar. That usually results from the selling of the products of the area itself, in terms of fruits, vegetables, or crops of various kinds. Now, that is only one phase of it. Then, when you get into the next phase, you have community development, and there you get back in direct taxes that are far greater than what you have spent on building the project.

Senator HAYDEN. There is no doubt about that.

NEED FOR THE DALLES AND ICE HARBOR DAMS

Secretary CHAPMAN. There is no question about it.

The people in the Northwest, and the Federal Government at this time, need Ice Harbor and The Dalles, and we need them badly. We need them because power is so essential at the time and for the future. We need these projects for their flood-control features. But I am speaking to you now from the point of view of the power that we need.

This is one of the short power areas of the country; in fact, it is the shortest as of the moment. If we should have a dry year and a low water year there, it would mean that we would have less kilowatts for sale, and some of the defense plants that have been located in that area would be in serious difficulties.

I realize that this dam could not be finished in 2, 3, or 4 years. You have to think of your planning, in these kinds of programs, not in terms of a few years but in periods of 10 years.

Senator MCCLELLAN. The demand for power in that area will continue to increase over that period.

Secretary CHAPMAN. Not only there but in every area of the United States. The demand for power is increasing so that there is no argument here between private and public power. I am talking about kilowatts from any source that we can get them. There is no argument on that score.

Now, I want to make a statement for the record.

Senator ELLENDER. Mr. Secretary, before you proceed, there is one thing you have overlooked.

Just stop and think of the millions of tons of coal and oil you save by using this falling water to produce power which otherwise would have to be produced from oil and coal. Have you ever stopped to figure that out?

Secretary CHAPMAN. There you are using a nonrenewable source when we have to make steam out of oil. We used some 11,000,000 barrels of oil in California alone last year making steam power.

Chairman MCKELLAR. And we do not know how long it will last, either.

Secretary CHAPMAN. And there were 1,000,000 kilowatts going over the river that we were not using.

Senator ELLENDER. It is a God-given natural resource that cannot be replaced.

Secretary CHAPMAN. We talk about having so much coal. Why should we worry about it? You are coming to a day when you are going to use coal in a different form. You are going to come to a day when you are going to use coal in liquid form. It is going to be burned in your furnace in the form of liquid fuel. While you are living, it is coming, and it is going to be done commercially and not by the Government.

Now, when you reach that stage of our development scientifically, you have tapped a new resource that we never dreamed of using before.

The United States has one of the largest coal reserves in the world, but why should we use that for this purpose when you can use water for nothing?

I am now going to refer to these projects briefly, because the Corps of Engineers has the detailed statements. I have the over-all picture of where we need the power from these projects.

ALBENI FALLS PROJECT, IDAHO

I am going to refer to the next one, which is Albeni Falls.

This very essential storage project is planned to have a capacity of 42,600 kilowatts initially, with an ultimate capacity of 227,000 kilowatts. The initial capacity is estimated to cost $31,000,000. Of this amount, $2,900,000 was appropriated last year for construction. The appropriations as recommended by the House did not contain any funds for continuation of this construction this year.

Chairman MCKELLAR. Was there a budget estimate for it?

Secretary CHAPMAN. Yes, sir. Now, I just do not know how to express this—it is one of the best projects you have.

Senator MCCLELLAN. When compared to the returns.

Secretary CHAPMAN. It will bring in the power the fastest—and we need it—as quickly as we can obtain it there.

EMPHASIS ON THE DALLES AND ICE HARBOR PROJECTS

Referring again to Ice Harbor and The Dalles, two major projects that will be coming into production at a time when we will need the power badly. That is, I am putting the emphasis on these particular projects here today.

The statement that I wanted to make was this: On Oahe Dam there has been an estimate presented.

A member of my staff who was reasonably new to my staff, and who was not familiar with some of the policies involved in the total picture, has written a letter over his signature to a Senator that just was called to my attention today, indicating that the Oahe project was too far advanced in the future to become of value in our need for defense electric power at the moment. That is not in accord with the Department's policy.

Senator McCLELLAN. Too far advanced or too little advanced?

Secretary CHAPMAN. It is too far in the future before it could be brought into production.

That is not the policy of the Department. This gentleman is one of the best employees we have. I mean, that he would never, if he had been familiar with the firm policy, have done that. Understand, that he is one of the fine gentlemen of my staff, and I have the greatest confidence in him. I want to be sure that the record is straight on that question of Oahe Dam, and I wanted to be sure that you understand that the statement is not correct, because we have to look beyond 2 years, 3 years, or 4 years in developing these power projects.

The Oahe project is one of those that I wanted to see developed, and I think it should be developed.

Now, I want to get back to Ice Harbor and The Dalles. When we come back to Ice Harbor, I have the Fish and Wildlife Service raising the question that the destruction of fish is too great, so they prefer not to see it built.

I can understand their opposition, and I do not blame them for it because it is their responsibility to preserve and conserve fish for commercial purposes. That is their job. But, when I have to make a decision as Administrator for the Department as between the amount of destruction on the fish that may be caused by Ice Harbor, by the building of this project, and the values that the Nation will get from electric power that is needed and the flood-control benefits that are necessary, I have made my choice that we should build the dam—not that I want to hurt any established industry in any way in the world.

I have refrained from approving several projects in the Northwest because those projects, I thought, carried too high a percentage of destruction of the fishery.

Some people may say that I am not consistent in my position, approving one and not the other. But each project is entirely different. Each must be considered and evaluated on what it means in the total benefits. That is what I have done in two cases; as a matter of fact, one private power and the other public power. I have refused to approve both of them.

Senator McCLELLAN. That is just like the case in some areas where you can condemn lands and take a loss and build a dam and a reservoir while in another area where there would be a good dam site you cannot afford to flood out a large plant or a whole industry.

Secretary CHAPMAN. Yes.

Senator MCCLELLAN. You have to weigh one against the other.

Secretary CHAPMAN. That is right. Now, I am going to skip over here to the back part of this and give you some figures on kilowatts and on some more dams that I want to mention.

MCNARY DAM, WASH.

I want to call your attention to the fact that the appropriations as recommended by the House are going to cause a slowdown on McNary Dam. I think it is very serious to have a slowdown on McNary Dam which should be completed as quickly as we can. You have slowed it down at least 1 year by the present rate, and it ought to be speeded up, if anything. I would speed it up as fast as the engineers can possibly use the money to finish the dam because we need the power. You will get your revenues quicker. You are committed to finishing it; you certainly would not let the dam stand as it is now. No one would think of doing that.

Then the point would be: Let's finish it as fast as we can economically. I can't understand—sure, I can understand that you have to keep the relationship to our income and the relationship to our total revenue and the budget of the Government. I am talking here in terms of an individual project that we are committed to as a Government. You have spent millions of dollars, and you are going to finish it. Now, why not finish it as fast as we can and get the benefit of the power at the earliest possible date, because we need it?

Now, those are the things that I would like to see this committee give serious consideration to.

Senator CORDON. Is not this a fact, Mr. Secretary, that McNary Dam at this time has already been constructed so far as the concrete is concerned, and the closure was effected last year? It is now planned to be in operation, so far as its power aspects are concerned, by December of 1953?

Secretary CHAPMAN. That is correct.

Senator CORDON. Then power will go on the line, if the engineers' schedules can be met in dollars?

Secretary CHAPMAN. That is correct.

Senator CORDON. Until that power is on the line—and it is already sold and oversold—the investment is paying nothing annually, while the minute you put the power on the line your total investment starts to bring in a return toward its ultimate amortization.

Secretary CHAPMAN. That is right.

Senator CORDON. Incidentally, I am advised that the excess of returns there over amortization annually will be more than the amount that is needed to bring this year's appropriation up to the amount that the engineers estimate, and that will be true every year.

Senator HAYDEN. You mean that if we put up enough money to finish the job now, the return in 1 year will repay——

Senator CORDON. The difference between what the House allowed and the total amount in the budget will be met when the generators are fully installed by the excess of income over operation and amortization in 1 year.

Secretary CHAPMAN. In 1 year; that is correct.

Senator CORDON. The annual amortization comes out, operation and maintenance comes out, and when all of the generators are installed, the excess of income over what is necessary for those two payments, amortization annually, will take care of the difference in this appropriation in 1 year.

Senator HOLLAND. What is the amount of the recommended reduction in the appropriation?

Secretary CHAPMAN. It is $6,900,000, I believe, as I remember the figure, Senator.

Senator HOLLAND. In the case of Albeni Falls and Oahe—and you mentioned both of them—how much has been spent on the construction of each one of them and what do you recommend?

Secretary CHAPMAN. I will have to ask the Corps of Engineers for that. These projects are being constructed by them, and I don't have the construction figures available to me at the moment. However, I can put those in the record for you. They may have them; I am not sure.

Senator HOLLAND. You see, it might make a great difference as to what the stage of construction is.

Secretary CHAPMAN. That is right.

Senator HOLLAND. Now, in the case of McNary Dam we are through with the dam and it has been closed. It is now a matter of making the power available as quickly as possible.

Secretary CHAPMAN. That is right. Oahe, I happen to know, is not under construction at the moment, but Albeni Falls is, I believe.

APPROPRIATIONS TO DATE ON ALBENI FALLS PROJECT

General CHORPENING. Both of those projects are under construction, Mr. Secretary.

Secretary CHAPMAN. I am glad you corrected me on that.

General CHORPENING. On Albeni Falls, $2,900,000 has been appropriated out of a total cost of $31,070,000. We asked this year for $10,000,000 which was an approved budget estimate. No funds were allowed by the House.

Senator HOLLAND. What is your schedule, and when does your schedule call for the completion?

General CHORPENING. The schedule for Albeni Falls calls for completion in either 1954 or 1955.

Secretary CHAPMAN. I believe that is 1952.

General CHORPENING. We will provide storage by August 1952, which will have a great value at existing plants downstream.

Senator CORDON. When the storage is complete at Albeni Falls, and before any generation is installed, the regulatory dam downstream represents how many thousands of kilowatts of energy—not capacity, but energy?

General CHORPENING. That would be 100,000 kilowatts of capacity and the energy would amount to 876,000,000 kilowatt-hours of primary energy.

Senator CORDON. That will be created downstream without the addition of a single kilowatt of energy at the dam itself?

General CHORPENING. That is correct, sir.

Senator CORDON. That will be just the additional regulating of the water after the dam is already constructed?

OAHE DAM

Senator HOLLAND. What is the situation with respect to Oahe?

General CHORPENING. $9,600,000 has been appropriated to date. There was an approved budget estimate of $3,770,000. No funds were allowed by the House.

Senator HOLLAND. What is your schedule?

General CHORPENING. The present schedule provides for completion in 1959.

Senator CORDON. Is that the large dam or is that the regulatory dam?

General CHORPENING. That is the large dam just above Pierre, S. Dak. The reregulating dam is at Gavins Point, just below Fort Randall.

Senator HOLLAND. That has not been started?

General CHORPENING. No, sir; it has not been started.

Senator THYE. When do you anticipate that you are going to start Gavins Point?

General CHORPENING. We had an approved budget estimate of $5,000,000 to initiate that project this year. None was allowed by the House.

Chairman MCKELLAR. That was not in the budget, was it?

General CHORPENING. Yes; that was in our approved budget figures for fiscal year 1952, sir. It was eliminated by the House.

Chairman MCKELLAR. It was taken out by the House?

General CHORPENING. Yes, sir.

Senator THYE. The full effect of your generating capacity at Fort Randall will never be had until such time as Gavins Point Dam is completed?

General CHORPENING. That is absolutely correct, sir.

GAVINS POINT PROJECT

Senator THYE. Your Gavins Point Dam generating capacity will be how much, once it is completed?

General CHORPENING. It will be 100,000 kilowatts.

Senator THYE. But it will strengthen and improve the generating capacity of Randall?

General CHORPENING. Gavins Point Reservoir will permit realization of the full power potential of the Fort Randall project and will generate a large amount of power itself. Gavins Point is necessary to realize the best power production at Fort Randall in that it allows peaking operation during ice periods which would otherwise cause serious ice jams with resultant flooding and hamper downstream navigation in open-water seasons. Studies of ice conditions on the Missouri River indicate that without reregulation to be provided at Gavins Point winter power peaking at Fort Randall will not exceed 120,000 kilowatts of the total installed capacity of 320,000 kilowatts. Completion of Gavins Point will permit power peaking to the full capacity of 320,000 kilowatts thus increasing the available peaking power 200,000 kilowatts. In addition to increasing the power available from Fort Randall, Gavins Point itself will have a capacity of 100,000 kilowatts and produce 699,000,000 kilowatt-hours of energy under present-day hydrologic conditions.

Senator THYE. Out of Randall?

General CHORPENING. Yes, sir.

Senator THYE. And you will not be, of course, able to get under way until the appropriation is allowed and therefore, even if it was allowed this year, you wouldn't expect to have the Gavins Point Dam completed until 1956, would you, or 1957?

General CHORPENING. The first power at Gavins Point will be placed on the line in 1956.

Senator THYE. And the installation at Randall would be some time in 1954 or 1955?

General CHORPENING. We have already lost a year on this project.

Senator THYE. Then it will be 1955?

General CHORPENING. No, sir; the first power is scheduled for November of 1953, the last unit however, will not be installed until March 1956.

Senator THYE. Your completion date was 1955, but you are behind a year now, and so that will make it 1956?

General CHORPENING. That is correct sir.

POWER AT RANDALL DAM PROJECT

Senator THYE. It will be 1953 before you commence to generate electricity at Randall?

General CHORPENING. That is correct sir.

Chairman MCKELLAR. Let me ask you this, General: It is true, is it not, in these cases, where construction has stopped, that there is a force working at the dam, and when there is no appropriation made there is a stoppage of the work that costs you about 33⅓ percent of the whole job?

General CHORPENING. That is a general average on prospects where we have already started on the project.

Chairman MCKELLAR. Where you have already started?

General CHORPENING. That is correct, sir.

Chairman MCKELLAR. You have to remove the men and the tools there?

General CHORPENING. Such an action would entail a great waste of energy and money.

Chairman MCKELLAR. That is true.

Senator THYE. Mr. Chairman, I want to get a reply from the general relative to when the first hydroelectric current will be generated at Randall.

General CHORPENING. That will be November 1953. That will be the first.

Senator THYE. That will be the first hydro unit?

General CHORPENING. Yes, sir.

Senator THYE. And that will be how many kilowatts?

General CHORPENING. That would be 40,000 kilowatts.

Senator THYE. That would be just enough to run the installation itself; will it not?

General CHORPENING. No, sir; the installation at Fort Randall would not require that much.

Senator THYE. And that would be nowhere near the full capacity?

General CHORPENING. That is right, sir.

Senator THYE. What time would it be when you would have the current available to go into western Minnesota, I mean when you would have surplus sufficient to allow western Minnesota to commence using that hydroelectric power?

General CHORPENING. I would say that shortly after we get the first units in operation there will be power available.

Of course, the distribution of power and where it is actually placed, as you understand, is a responsibility of the Secretary of Interior. That is not a part of our responsibility.

Senator THYE. But you know what the kilowatts would be that would be needed at the dam, and what each hydroelectric unit would generate.

I might ask the Secretary then, Mr. Chairman, if I may: What do you think we would commence to have, or when would you be able to furnish us with electricity in western Minnesota?

Secretary CHAPMAN. If you will furnish the appropriation to finish that dam, within the next year, we will have it ready.

Senator THYE. Can you finish it in the next year? Don't you think it would take 2 years?

Secretary CHAPMAN. I think economically it will take 2 years.

Senator THYE. That would be 1953?

Secretary CHAPMAN. I would say in 1953, but that is only a guess.

Senator THYE. That would be, economically?

Secretary CHAPMAN. I would give them the money to finish the dam as fast as they could economically finish it.

Senator THYE. I would be for that. But, if they finished in 1953, when will there be an ample amount of electricity so that some of it could be wheeled over into western Minnesota?

Secretary CHAPMAN. I think that would be from 3 to 6 months, if we get our appropriations accordingly.

Senator CORDON. About two generators a year are all that you can put in to a dam?

Secretary CHAPMAN. Mostly.

POWER UNITS AT FORT RANDALL DAM

Senator THYE. And Randall contemplates how many?

Secretary CHAPMAN. I have forgotten how many Randall has in its plans.

General CHORPENING. It is a total of eight units.

Senator THYE. Eight units?

General CHORPENING. Yes, sir. The first one is scheduled around November 1953 and the last one in March of 1956.

Senator THYE. The last one in March of 1956?

General CHORPENING. Yes, sir.

Senator THYE. Then you must take Gavins Point Dam to add to that, or do the eight units include Gavins Point Dam?

General CHORPENING. They do not, sir.

Senator THYE. So you would not commence to get your full available electrical current until the year 1956, providing we give you the appropriation for Randall in this appropriation bill?

General CHORPENING. Again you mean Gavins Point?

Senator THYE. I beg your pardon; Gavins Point, in this appropriation bill.

General CHORPENING. That is correct sir.

Senator THYE. Thank you.

Secretary CHAPMAN. Now, Mr. Chairman, I don't wish, because I am skipping around in this statement, and hitting the highlights if I miss mentioning one particular dam, when you read the record later, to have you not consider one dam just as important as another, because these are all important. When we put them into this statement, we did it on the basis of what we thought was essential and the need now.

Someone raised the question of using the renewable resources or nonrenewable resorces to generate power.

Take, for instance, Old Hickory Dam. That project ought to be built, it ought to be put into the program now, because it fits into firming up the power that you need in that area, and you will not get the full benefits if you don't do it now.

Chairman MCKELLAR. That is the wisest thing you have said.

Secretary CHAPMAN. Well, Senator, to me that is just as essential as building the original dam.

Chairman MCKELLAR. I agree with you 100 percent.

Secretary CHAPMAN. It is not a question of just expanding to see if we can get some more jurisdiction, it is a question of expanding for the purpose of making it a businesslike proposition. You need the Old Hickory Dam to make the rest of those projects in there better paying projects.

Now, I mention that particularly because that one is not in the program as yet.

Chairman MCKELLAR. I will admit that that is a good illustration.

Secretary CHAPMAN. We ought to have it.

Chairman MCKELLAR. Yes, sir.

Secretary CHAPMAN. Now, let me go through and read just a page or two here, because it contains some figures that I think are essential.

EFFECT OF HOUSE ACTION

Now, in the large western area exclusive of the Pacific Northwest, the House action will delay the Folsom and Garrison projects by 1 year, will delay the Fort Randall project about 7 months, and will indefinitely delay the Gavins Point and Oahe projects.

The initial installed generating capacity of these projects is 1,150,000 kilowatts.

The 1-year delay in the Folsom project will disrupt the plans for a feasible rate of development of Folsom Dam and power plant so as to have initial power available by July 1954. The dam is under construction, materials have been placed under contract by the Bureau of Reclamation for the power facilities, and the work should be continued as scheduled.

This is especially important for the conservation of fuel. On December 31, 1946, only 34 percent of the total generating capacity in this area was in fuel plants. During the period 1947–50, 69 percent of the added generating capacity was in fuel plants, and 79 percent of the new generating capacity scheduled for installation during the years 1951–54 is in fuel plants.

POWER FUEL PLANTS

It is presently estimated that fuel plants will constitute 55 percent of the total generating capacity in the area by the end of 1954.

Senator HAYDEN. That area is northern California?

Secretary CHAPMAN. Mostly, yes. In that area it is presently estimated that fuel plants will constitute 55 percent of the total generating capacity in the area by the end of 1954.

Senator HAYDEN. All of that fuel has to be imported?

Secretary CHAPMAN. At the moment it does not, but generally it will soon have to be done. Some of it is even now imported.

What that means is this: That the estimated requirements for 1951 are the equivalent of 31.9 million barrels of fuel oil.

If 1954 is an average water year, the estimated requirement then will be the equivalent of 46.3 million barrels, and if 1954 is as dry as 1931 was, the requirement will be the equivalent of 58.8 million barrels.

The risk of increased dependence on an adequate fuel supply for the coast of California is not, in my judgment, warranted.

CAPACITY POWER OF GAVINS POINT AND FORT RANDALL DAMS

The installed capacity of the Gavins Point project will be 100,000 kilowatts, and it will produce 51,000 kilowatts of firm power. Gavins Point is more important as an afterbay for the Fort Randall plant, since it will be used to reregulate the flow of the Missouri River below Fort Randall and thereby permit the latter plant to produce 314,000 kilowatts of firm power.

Now, there is where you will get your power for western Minnesota.

Senator CORDON. That is a regulating dam?

Secretary CHAPMAN. That is a regulating dam. That is part of your flood-control program.

Senator CORDON. That is navigation, too?

Secretary CHAPMAN. Exactly.

Senator CORDON. It is one instrumentality which will permit of a flood-control reservoir to operate as a flood-control reservoir and still maintain a constant flow in the stream below the regulating dam?

Secretary CHAPMAN. That is correct. That is the purpose and that would be the real effect of this kind of project.

Senator THYE. Can we in western Minnesota expect to receive current from those installations, both Randall and Gavin, the minute that you commence to generate electricity?

Secretary CHAPMAN. Yes. You would be entitled to some of that power and no doubt would get some among the first power generated.

Senator THYE. You mean you would wheel some of it past some of the cities in South Dakota, both west of Missouri and east of the Missouri, to reach the most distant user of that current? In other words, we on the east would expect then to have some of this current wheeled right by cities in South Dakota and have it come right to us and prorate the current to not only the Minnesota users but the South Dakota users as well?

Secretary CHAPMAN. Senator, if the cooperatives of your State do not want it, then do not let them bother us with it, because we have so many people who want it in North and South Dakota.

Senator THYE. The cooperatives?

Secretary CHAPMAN. They are the ones who will get it.

Senator THYE. I grant you that because the law provides that, but the municipality, too, would be asking for it and my question was, would you bypass users in South Dakota to wheel it right through to our section of the country, Minnesota, and prorate the kilowatts to all from the installation clear through to South Dakota and Minnesota?

Secretary CHAPMAN. Before I would answer that question I would want to find out better in my mind how many kilowatts would be made available in that area at that time in a total power pool for that whole area.

Senator THYE. Your Randall installation would be one.

Secretary CHAPMAN. There would only be one.

Senator THYE. Who would be the other?

Secretary CHAPMAN. We would. The Reclamation Service would have some in that area and the Corps of Engineers would have others that would fit in the pooling arrangement of power.

Senator THYE. You say reclamation. Would you add any besides Randall and Gavins Point installations?

Secretary CHAPMAN. I do not know of any.

Senator THYE. You would have to go clear up into North Dakota before you had other installations.

Secretary CHAPMAN. Yes, but you can put that in a power pooling arrangement that will help you transmit your power much cheaper.

TRANSMISSION LINES, MINNESOTA

Senator THYE. That is true, but the question I am concerned with and I am trying to find the answer to is simply this: When will it be necessary for transmission lines to be constructed in western Minnesota to wheel the current over? That is the question. Will we immediately have current in western Minnesota when you have completed the first hydro installation at Randall Dam?

Secretary CHAPMAN. I will say this without first having the facts before me. I would doubt you would have it among the first installations. You are forcing me to make a decision here on a choice between two preference customers under law which of this moment we have never had to make, that is, between the city and the cooperatives.

Senator THYE. The only reason, Mr. Secretary, is this, that the Budget Bureau did not provide any appropriation or did not recommend an appropriation for transmission lines for western Minnesota. In other words, they did not think it advisable at this time. The reason I asked you the question was simply to have some information when it would be necessary for transmission lines to be constructed in western Minnesota in order that the transmission lines should be there to wheel the current the minute that you have current available for us. That is why I asked the question could we expect their current the minute you have the first installation.

Secretary CHAPMAN. I doubt if it would be available among the first installations, but we will say, for instance, it was not necessary to have in this particular budget our request for transmission lines into Minnesota at this particular moment. If we got it into the next year's budget, we could about meet the construction date if that is the way we were going to divide the power anyway.

Senator THYE. I am very happy that you say that. There are some of us who concurred in your views insofar as the budget is concerned, and we have taken some criticism that we did not go over and beyond your recommendation and also the Budget Bureau's recommendation and support the appropriation for transmission lines at this stage.

Secretary CHAPMAN. Gentlemen, we have others that are more ready for immediate use than this one would be.

Senator THYE. That is what I thought, and I thought we had demands for appropriations that were more demanding on this Appropriations Committee.

Secretary CHAPMAN. I do not have any argument on that point of view. The thing I am concerned about, Senator, is this: If we can all keep our minds focused on the ultimate objective here and the scheduled date the Corps of Engineers have presented to us as to when these various projects could be finished, then you have to finish in terms of when we can build transmission lines and get the power out to the people who are the preference customers under the law, the cooperatives, the municipals, and the Federal installations.

Now I thought for a moment I was about to be getting into a corner where I would have to make a decision as to preference between a cooperative and municipality.

Senator THYE. No, sir, I never asked that. All I wanted to know was could we expect current in western Minnesota the minute you commenced to turn the generating unit, the first generating unit at Randall Dam.

MARKET FOR GAVINS POINT DAM POWER

Secretary CHAPMAN. I did not mean to imply you asked that. I meant to imply that was my first concern of making the decision between those two preference customers which I did not want to make at this time.

Now there is an immediate market for the 233,000 kilowatts of firm power which Gavins Point will make possible. When I say immediate market I mean there is a demand and request on file in our office from North Dakota, South Dakota, Minnesota, and all the adjoining States that would take every kilowatt that you could produce, every one. As a matter of fact, North Dakota could take all of this.

Senator THYE. Mr. Secretary, every year we add a heavier load in each little farming unit across the entire United States. We are just commencing to learn how to use electricity.

Secretary CHAPMAN. That is correct, we are just beginning to learn how to use it and we are now beginning to get revenues back into the Federal Government to pay for what we are putting into it.

Senator THYE. The first view was nice and the average man thought that was the end he would prepare himself for. We are just commencing to learn how to use electricity.

Secretary CHAPMAN. I hope we can continue our development along that line.

I mention these States because North Dakota and South Dakota and Minnesota are obviously in the market and need this power. They need it very badly.

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Now I have spoken of several of these projects probably with some intensity because I happen to be in a position where I am getting the pressure from the other side to produce and develop certain power that is needed for the defense program. Therefore I am naturally concerned that these projects should be finished. I am anxious that they be done on an economic schedule. I think the schedule that is presented by the Corps of Engineers is an economic program, one that is sound, and I hope that this committee will give serious consideration to restoring these funds because it is important.

Now this is not a jurisdictional problem, Senators; this is a question where certainly two departments have worked together in harmony to produce the thing which we think the people need in those areas, the thing the people have asked for. They need them, they want them, and I want to do my share in helping to deliver that to them if I possibly can. I want to thank the Corps of Engineers for what I think is a swell job in getting their case presented on this.

Chairman McKellar. Thank you very much.

Secretary Chapman. Thank you, Mr. Chairman.

River and Harbors Program

THE DALLES DAM PROJECT, OREG.

INDIAN FISHING CLAIMS

Senator Cordon. I ask that a letter addressed to me and signed by General Chorpening with respect to certain Indian claims, fishing claims, that arise as a result of the Dalles Dam project be placed in the record, and follow the statement of Secretary Chapman, please.

Chairman McKellar. Without objection, it is so ordered.

(The material referred to is as follows:)

Department of the Army,
Office of the Chief of Engineers,
Washington, July 12, 1951.

Hon. Guy Cordon,
United States Senate,
Washington, D. C.

Dear Senator Cordon: In response to recent request by telephone from your office, I am pleased to furnish the following information concerning Indian fishing rights relative to The Dalles project.

By treaties of June 1855 with the United States, the Yakima Nation, Umatilla and Nez Perce Indians, and the Confederated Warm Springs Tribes were secured "* * * the right of taking fish at usual and accustomed places, in common with the citizens of the territory * * *". The rights of the Warm Springs Indians were relinquished by treaty in 1865. The Mid-Columbia Indians are not covered by any treaty of record; however, they claim certain inherent and perpetual rights to fish on the Columbia River. The Yakima, Umatilla, Nez Perce, and Warm Springs Indians have intermarried and these tribes in turn have intermarried with the Columbia River Indians including the Celilo Cascade, Klickitat, and Wasco tribes. The descendants of all these tribes have fished for many years at Celilo Falls and other places. The population of the Indian nations and tribes of 1950 was about 7,800.

Fishing sites of the Indians at Celilo Falls and its vicinity will be affected by construction or inundated by The Dalles Reservoir. Investigations by the Fish Commission of Oregon indicate that the number of fishing sites at Celilo Falls and also the number of Indians fishing vary from year to year. In 1948 the Indians maintained 79 stationary platforms and 93 movable dip-net stations, and numerous fixed and movable stations were in use in other locations from Big Eddy to Celilo Falls. From 1 to 10 Indians take fish by dip-net at each of these stations. The Oregon Fish Commission estimated about 2,000 Indians fishing at these sites taking

fish for subsistence and retail sale as fresh food and for sale to commercial canneries. Estimates by other sources indicate as many as 4,000 to 5,000 Indians are engaged in or are partially dependent on this fishery.

The best available estimate on the amount of fish taken by the Indians in the commercial fishery has been made by the Oregon and Washington State Fishery Departments from delivery of fish to canneries and observations on sales of fresh food fish. These estimates indicate a range from 1,200,000 to 3,700,000 pounds annually with an average of 2,140,000 pounds annually over the period 1938–48. However, other estimates place the average annual commercial take at about 2,500,000 pounds. Factual data on the subsistence catch are meager. From a survey made by the Bureau of Indian Affairs among 55 families of Yakima, Umatilla, and Warm Springs Indians, an estimate was made of the annual consumption in terms of pounds per family. On this basis it was estimated that the total annual consumption of salmon was 1,281,000 pounds. Investigations by the Oregon Fish Commission during the past 3 years indicate that the consumption may be somewhat less than the estimate made by the Bureau of Indian Affairs. Other estimates have placed the subsistence catch at approximately equal to the poundage of the commercial take.

Although no substitute sites of equal fishing value are available, it is possible to construct platforms extending from the shore into the head of the Bonneville pool about one-half mile below The Dalles Dam which would not interfere materially with the passage of fish at the dam. From such locations and from other possible additional provisions, the Indians may be able to take a considerable part of the fish that would be required for subsistence. However, the fishery agencies of Washington and Oregon have expressed opposition to any such arrangements for supplying fish to the Indians.

At all of the hearings where the Indians have presented their views on The Dalles Dam, although their opinions were somewhat divided, the Indians have generally contended and stressed their need for fish as a large portion of their food. Should subsequent agreements be reached which include provisions for subsistence fishing, it would be necessary to provide some substitute fishing sites with facilities and to provide the Indian villages with facilities for drying and processing fish. The estimated cost of such facilities has been included in the cost estimate for The Dalles project.

Compensation for any deficiencies which would not be provided by the provision of alternate fishing sites, is considered just and proper. On the basis of the various estimates of the poundage taken in the Indians catch as discussed above, the annual gross value averages from about $475,000 to $650,000. The Committee on Appropriations, House of Representatives, in its Report No. 544 on the Civil Functions, Department of the Army appropriation bill fiscal year 1952, indicated that the economic loss to the Indians owing to the effect of The Dalles project upon their fishing rights were estimated at $900,000 annually. It will be necessary however, to obtain more detailed information than now available on the amount and value of the Indian catch at Celilo Falls in order to determine the basis for negotiating settlement with the Indians. The estimated cost of The Dalles project is $326,366,000 and the estimated annual charges are $16,720,000. The estimated annual benefits are $21,572,000 and the ratio of benefit to cost, accordingly, is 1.29. Assuming the highest estimate of $900,000 annually for the fishing rights of the Indians, if charged to project costs, with no increase in benefits, the annual cost would be increased to $17,620,000 and the benefit-to-cost ratio would then become 1.22.

It should be noted, however, that Indians and other fishermen now take about 40 percent of all salmon passing the Bonneville Dam. In the opinion of the State agencies and other interests in conservation of fishery resources, the continuation of commercial fishing above Bonneville Dam endangers the entire resource. The elimination of commercial fishing if accomplished through construction of The Dalles Dam, accordingly, would be a continuing direct and outstanding contribution toward conservation of the fishery resources in the Columbia River Basin. These factors, therefore, would have to be evaluated in order to determine net costs and benefits for The Dalles Dam.

The Corps of Engineers has been actively studying the problem of reaching an equitable settlement with the Indians relative to their fishing rights which will be affected by the construction of The Dalles Dam. In studying of those problems, the advice and assistance of other agencies who are interested are being obtained. To date no negotiations have been conducted by the Corps of Engineers with the Indians affected. Discussions have been held, however, with the Indian Service. That agency has suggested that negotiations when held be between the Corps of

Engineers and the Indians with the Indian Service acting in an advisory capacity. As soon as funds are made available for initiating construction, it is planned that negotiations will be undertaken with the Indians to reach an early and equitable settlement relative to their fishing rights.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, United States Army,
Assistant Chief of Engineers for Civil Works.

MINNESOTA FLOOD-CONTROL PROJECTS

STATEMENT OF HON. HUBERT H. HUMPHREY, A UNITED STATES SENATOR FROM THE STATE OF MINNESOTA

SURVEYS AND PRELIMINARY EXAMINATIONS

Chairman MCKELLAR. The next witness is Senator Humphrey.

Senator HUMPHREY. Mr. Chairman and gentlemen of the committee, I have with me at the table the mayor of North Mankato, Mr. H. C. Wollam, and the city engineer from North Mankato, Mr. Frank J. Magnuson, and also the city engineer of the city of Minneapolis, Hugo Erickson, and A. D. Strong, secretary of the Upper Mississippi Waterway Association.

I am going to make my remarks very brief and ask permission to submit a statement for the record. Then I would like to have the gentlemen who have come here present their information to the committee.

My colleague, Senator Thye, has already brought to the attention of the committee, I am sure, most of the material that we have with us today. We are hopeful that with the Senator on the committee and with the representation that I have surrounding me we will be able to persuade the committee of the validity of our case.

Chairman MCKELLAR. Is there a budget estimate for it?

Senator HUMPHREY. Yes, the budget estimate for certain flood control preliminary surveys and examinations was included by the Budget Bureau but the House struck that from the measure.

Chairman MCKELLAR. How much was it?

Senator HUMPHREY. The total appropriation requested for all projects of the Army engineers, of which some Minnesota projects were a part, was $5,700,000.

Now I want it quite clear that this does not affect the State of Minnesota alone; it affects all the surveys and preliminary examinations under the Corps of Engineers' rivers and harbors and flood control program.

Senator STENNIS. What are the names of the projects?

Senator HUMPHREY. The projects that we refer to in this testimony pertain to those flood control surveys of the Red River of the North, the Minnesota River and portions of the Mississippi. We will refer today, and I do in my prepared statement, to the recent floods in the State of Minnesota that affected the area around East Grand Forks, Crookston, Aitkin, North Mankato, Winona, Springfield, Marshall, and other areas.

Senator CORDON. Do you have reference to the item "Preliminary examination, surveys, and contingencies" for which the budget estimate was $4,500,000 and all of which was denied by the House?

Senator HUMPHREY. That is correct.

Senator CORDON. The items that you are going to testify to are embraced within the items that make that total?

Senator HUMPHREY. That is right.

Now, Mr. Chairman, I ask permission to place my statement in the record.

Chairman MCKELLAR. Senator, that will be done.

(The statement referred to is as follows:)

STATEMENT OF HUBERT H. HUMPHREY, UNITED STATES SENATOR FROM MINNESOTA, BEFORE SENATE APPROPRIATIONS COMMITTEE ON FLOOD SURVEY APPROPRIATIONS

The Army Civil Functions Act for the fiscal year 1952 passed by the House of Representatives does not include an appropriation of $5,700,000 for the Corps of Engineers' river and harbor flood control preliminary examinations and surveys and flood control contingencies. This appropriation was recommended by the Bureau of the Budget and was to be applied only to those projects considered to meet certain criteria established for the present national emergency.

The following statement by Wright Hiatt, colonel, Corps of Engineers, and Deputy Chief of Civil Works for Food Control states that if these funds are not restored by subsequent action on the House act the entire examinations and surveys program will have to be curtailed. I wish the committee would give serious consideration to this memorandum for I feel that continuing the flood surveys program is of vital importance to the future welfare of this country.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, July 20, 1951.

Memorandum for: Hon. Hubert H. Humphrey, United States Senate, Washington, D. C.

Subject: The Corps of Engineers' survey program.

Among the items recommended by the Bureau of the Budget for appropriation in the fiscal year 1952 Army civil functions bill, and eliminated in the House act, was an amount of $5,700,000 for the Corps of Engineers' river and harbor, flood control preliminary examinations and survey program and flood control contingencies. In fiscal year 1951 $6,850,000 was appropriated for this item. These funds are to cover all activities necessary for examinations, surveys, and review reports requested by Congress in the interest of flood control, navigation, and related water resources development throughout the entire continental United States, plus Alaska and possessions. These funds are to be applied to only those studies considered to meet certain criteria established for the present national emergency. If these funds are not restored by subsequent action on the House act, the entire examinations and surveys program will have to be severely curtailed during fiscal year 1952.

The need for funds for carrying out investigations for flood control, navigation and related uses is as urgent at this time as any time in the history of this program. The State of Minnesota has some 18 flood control and navigation studies authorized by Congress. The devastating floods of last year in the Red River Basin resulted in several studies being authorized by the Public Works Committee of both the House and Senate. In the spring of 1950 a major flood in the Red River of the North Basin caused many millions of dollars of damage to agriculture, residential and industrial areas in the United States and hundreds of millions of dollars in Canada. This spring, floods in Minnesota, particularly along the Minnesota and Mississippi Rivers, caused considerable damage. Hundreds of people had to be evacuated to safer ground. At the moment another great flood is taking its toll of destruction in the States of Kansas and Missouri. Many lives have been lost, and the estimated damage to agriculture, residential and industrial areas is now estimated to be $750 million. Where or when another great flood may strike is not known, but it could be in any State at any time.

The Corps of Engineers' survey program is Nation-wide; it includes specific investigations called for by Congress; it provides for preliminary examination of areas at small cost in order to eliminate costly detailed studies or unjustified projects. The program provides for the preparation of reports at field level where accurate, physical conditions and local views can be readily determined at

public hearings. It results in definite plans for specific projects in order that the engineering and economic feasibility of a project may be adjudged; and finally it provides a basis in accurate, complete and printed form for the final decision of Congress as to whether or not a project should be authorized.

Investigation of our river basins and coastal areas for flood control, navigation and related purposes should go forward in order that a well-planned and coordinated construction program of authorized projects can go forward as the Congress sees fit to make construction funds available.

Adequate flood protection for our agricultural, industrial, and residential areas and adequate navigation facilities and development of our water resources for power, conservation or water supply during periods of peace or war are an asset to our national economy. In view of the fact that all projects for flood control, navigation and related uses stem from first making an investigation to determine the feasibility of a project, I strongly urge that the examinations, survey, and contingencies funds requested by the Corps of Engineers for the survey program be restored.

WRIGHT HIATT,
Colonel, Corps of Engineers,
Deputy Chief of Civil Works for Flood Control.

My home State of Minnesota has experienced two record-breaking floods in the past 2 years. In April and May of 1950 heavy rains and melting snow produced outstanding floods in the northern half of the State. The most notable floods probably occurred in the Crookston and Aitkin areas. Near the international boundary, Roseau River at Ross reached the highest stage since 1896 and the peak discharge was nearly double that of 1948. Mississippi River also reached new highs. Red River of the North at Grand Forks, N. Dak., and below had peak discharges far above any other discharge previously recorded. At Grand Forks the river was above flood stage continuously from April 8 to May 31.

The maximum discharge on Red Lake River at Crookston, Minn., was 27,200 cubic feet per second on May 7, 1950, and the maximum stage was 25.67 feet. This was the highest discharge and stage observed there since the stream-gaging station was established in 1902. Prior to this flood the highest discharge had been 14,600 cubic feet per second April 15, 1906, with a stage of 21.0 feet. The highest stage prior to 1950 occurred March 25, 1920, when a stage of 23.3 feet was caused by an ice jam, although the discharge at the time was only 9,520 cubic feet per second. In all, the stage at Crookston has been above 20 feet seven times in the last 50 years and the discharge has been above 10,000 cubic feet per second six times.

In April 1951 major floods occurred on the Minnesota and Mississippi Rivers in Minnesota. These floods were reported by the Weather Bureau to be the most disastrous in the history of the State; preliminary estimates indicate the damage may exceed $10,000,000. The floods were caused by melting of excessive snow cover; average snowfall at 24 gages in Minnesota River Basin during March alone was 36.6 inches, more than 28 inches above normal. All towns from Montevideo downstream along Minnesota River were flooded and damaged. The floods on the Mississippi River were outstanding as a result of inflow from the Minnesota River and other tributaries below St. Paul. Nearly all river towns between St. Paul and LaCrosse, Wis., were flooded. Peak discharges in northern Minnesota were above the mean-annual flood but were not outstanding. The maximum discharge of Minnesota River at Mankato, Minn., was 68,000 cubic feet per second April 9, 1951, and the maximum stage was 26.20 feet. This was the highest discharge observed since the stream-gaging station was established in 1903. Prior to 1951 the highest discharge observed had been 43,800 June 26, 1908. However, it has been estimated that the peak discharge during the flood of 1881 was about 65,000 cubic feet per second. Because of changes in gage location it is difficult to make comparison of maximum stages. However it has been estimated that the flood of 1881 reached a stage of about 29.9 feet at the present site. The discharge at Mankato has been above 30,000 cubic feet per second six times in the past 49 years.

The maximum discharge of Mississippi River at Winona, Minn., was 178,000 cubic feet per second on April 18, 1951, and the maximum stage was 17.40 feet. This was the highest discharge observed there since the stream-gaging station was established in 1928. Prior to this flood the highest discharge observed was 135,000 cubic feet per second June 22, 1943. On June 18, 1880, the river at Winona reached an elevation of 657.14 feet above sea level, according to the Corps of Engineers. Converted to stage, this shows the 1880 flood to have been only a few tenths lower in stage than the 1951 flood.

On the Mississippi River at St. Paul the stage of 18.79 feet and discharge of 91,100 cubic feet per second on April 16, 1951, were somewhat less than those for the flood of April 1881, but were higher than for any flood during the intervening 69 years. The stage at St. Paul was above 17.0 feet during 5 of the 30 years from 1867 to 1897, but was below 17.0 feet from 1898 to 1950.

Discharge figures for the flood of 1950 and 1951 have not yet been published.

These floods have caused much damage to both public and private property and have resulted in an extreme amount of human suffering. The following reports are factual indications of the actual conditions:

STATE OF MINNESOTA,
DEPARTMENT OF MILITARY AND NAVAL AFFAIRS,
ADJUTANT GENERAL'S OFFICE,
St. Paul, July 26, 1951.

Hon. HUBERT H. HUMPHREY,
Senate Office Building, Washington, D. C.

DEAR SENATOR HUMPHREY: Governor Youngdahl has requested that I reply to your letter of July 19 in which you request a report of the Minnesota Disaster Relief Commission covering damages resulting from Minnesota floods in the past 2 years, in order that you may discuss with the appropriate committee of the Senate the advisability and need for the restrictions contained in H. R. 4386 which would reduce the amount needed for flood-control surveys. Insofar as the 1950 floods in northern Minnesota are concerned, I believe you have adequate information in your files concerning the extent of damages to public and private property.

Insofar as the 1951 flood along the Minnesota and the Mississippi Valley is concerned, we have a reasonable estimate on public damage but as yet do not have a complete report on private damage. I am attaching hereto a list of the affected counties and the public damage which resulted from the flood, together with the estimates of Mankato, North Mankato, and Winona, the communities most hard hit as the result of floodwaters.

Private damages in the Minnesota and Mississippi Valley flood area will total at least $15 million, with North Mankato alone, which was completely inundated, suffering total private damage of $11 million.

I trust this will be of some value to you and regret that I cannot give you a more detailed report at this time.

Sincerely yours,

J. E. NELSON,
Brigadier General, The Adjutant General.

Preliminary report of public damage in counties and cities in Minnesota as result of 1951 floods

	Total amount of damage (public)	
County:		
Blue Earth	$61,275.00	
Brown	17,000.00	
Chippewa	30,985.00	
Dakota	8,750.00	
Kandihohi	20,360.00	
Lac qui Parle	3,500.00	
Le Sueur	5,600.00	
Lyon	12,250.00	
Nicollet	[1] 25,000.00 4,550.00	
Redwood	40,625.00	
Renville	11,898.00	
Sibley	1,835.00	
Swift	34,550.00	
Watonwan	16,846.00	
Yellow Medicine	85,075.00	
		$355,099.00
City:		
Mankato	14,143.95	
North Mankato	193,734.00	
Winona	36,551.00	
		244,428.95
Total		599,527.95

[1] Included in Blue Earth County estimate.

MEMORANDUM

To: Senator Hubert H. Humphrey
From: Carl R. Myers
The American National Red Cross
Midwestern Area
Date: May 2, 1951
Subject: Minnesota Floods, 1951

From all indications this is going to turn out to be the worst disaster the State has ever suffered. I made a complete swing over the affected area yesterday and then sat down with the area director for 3 hours working up an estimated budget and it is going to cost a pretty penny. When you were here and visisted the Mankato area you just couldn't believe that the Red Cross would be in a position to take care of the needs of the disaster sufferers. For your information I am listing our commitments to date and I anticipate that an additional $200,000 will be expended by the Red Cross before we wind up the job. There were 4,635 families suffering loss and it is estimated that 3,229 of that number will have to be given Red Cross assistance. The following is a breakdown of our commitments to date.

Rescue, transportation, and mass shelter	$12, 912. 00
Food, clothing and other maintenance	79, 312. 68
Building and repair	246, 531. 44
Household furnishings	137, 770. 29
Medical nursing and sanitation	7, 950. 00
Farm supplies, livestock and equipment	10, 625. 00
Occupational training, equipment and supplies	13, 100. 00
Total	508, 201. 44

This does not include administration and accounting expense which may run as high as 10 percent because it will be some time before we can get into some of the homes.

There is no way of telling what the State is going to have to spend on the repair of streets, roads, bridges, etc., but I can assure you that the needs of the families will be met by the Red Cross.

NORTH MANKATO, MINN., *July 18, 1951.*

Senator HUBERT H. HUMPHREY,
Capitol Building, Washington, D. C.

DEAR SENATOR: As we all know another major flood disaster has occurred in Kansas City, Mo., and Kansas City, Kans., and other towns within the region. President Truman along with Gen. Lewis A. Pick, Chief of Army Engineers, flew over the area and President Truman made the statement "The worst I've ever seen". General Pick told a Grandview audience that "These floods need not have occurred. We have got to impound these floodwaters up in the upper reaches of the basins to prevent catastrophes such as you have seen in Kansas and Missouri. It can be done and the cost is nothing to the damage which has occurred here in the last 5 days."

I concur 100 percent in these statements and our catastrophe here in North Mankato was equally as great but considering the population naturally the total sum is not as large but on a percentage basis we are in exactly the same position, the difference being that we had to evacuate 98 percent of our entire population and we have families which are still out and several more moved back last week which was exactly 3 months from the time of the flood.

I am sending you a picture as an example of what some of the homes looked like after the flood waters receded in North Mankato. The job of correcting this situation is not a tremendous job but we certainly have to look to the Federal Government for help in protecting us in the future.

We are only 5,000 people who pay our taxes to both State and Federal and we are part of the Federal Government.

Now that we have had a tremendous disaster in Kansas and Missouri it seems only logical that now is the time to do something to correct a situation that need not have occurred.

I personally know that you are very busy but I still believe that we should be able to get together between Senator Ed Thye, Representative Joseph P. O'Hara and yourself and be able to present our brochures personally and to state the

facts as they are and what we as a city are doing for ourselves and what we feel that the Federal Government should take an interest in in order that disasters of this kind will not occur again.

It might be between Representative Joseph P. O'Hara, Senator Ed Thye and yourself that one might take the responsibility of putting forth all efforts possible to bring into being a correction of the things that caused the disaster.

I am ready at any time to come to Washington personally and present these facts to any group that you might have that would be willing to listen to the problem.

Sincerely,

H. C. WOLLAM,
Mayor of North Mankato.

CITY OF SPRINGFIELD,
Springfield, Minn., April 27, 1951.

HUBERT H. HUMPHREY,
United States Senator, Washington, D. C.

MY DEAR SENATOR: Enclosed find estimates of the Springfield flood damages which are being forwarded at the request of Mayor A. Wild.

Yours very truly,

A. C. MUELLER, *Clerk.*

Flood loss estimate, Springfield, Minn.

Homes	$6, 175. 25
Park road and tarvia	7, 000. 00
A. C. Ochs Brick & Tile Co	48, 858. 60
Total	62, 033. 85

CITY OF MANKATO, MINN.

June 20, 1951.

I. Public works damages: (a) Including repair of Pleasant, and Poplar Streets, and Lewis Field barracks: Total, $14,143.95.

II. Damages to private homes (extensive report included): (a) Total, $233,375. (Report included.)

MAYOR JOHN C. ZOTALIS.

Flood damage survey, June 11, 1951, 7 to 10 p. m

RESIDENCE

Districts covered:
Foot of West Rock Street.
Minnesota and Poplar and cross streets.
West Mankato west of West Street, north of Minneopa Road.
James Avenue.

Calls made	348
Not at home, not contacted	27
No damage claimed	32
Reports of damage	289

DAMAGE REPORTED

Damage to yard, lawn, shrubs, sidewalks, driveways, etc	$9, 815
Damage to garage	6, 479
Damage to basements includes heating plant and hot water heater	84, 584
Damage to residence above foundation	73, 807
Damage to household goods, store windows, screens and food	58, 690
Total	233, 375
Number of days spent away from premises	6, 293
Average number of days away from home for each household	21. 8

MARSHALL, MINN., *July 27, 1951.*

Senator HUBERT H. HUMPHREY:

Following 1951 damage date Minnesota River Valley furnished by Yoder, district engineer, St. Paul district. Montevideo, 54,400; Marshall, 225,190; Springfield, 55,000; Redwood Falls, unavailable; Mankato, 250,000; North Mankato, 1,201,255; Lesueur, unavailable; Henderson, 27,900; Jordan, unavailable; Carcer, 13,200; Chaska, 81,200; Shakopee, 10,000; Savage, 25,000; Emndota, 16,000; public utilities, 400,000; agriculture, 1,040,000; highways and bridges, 350,000; railroads, 100,000; Red Cross, 50,000; total, $3,899,145.

Dr. C. A. MCGUIGGAN, *Mayor.*

OFFICE OF THE MAYOR,
Marshall, Minn., July 26, 1951.

Hon. HUBERT H. HUMPHREY,
Senate Office Building, Washington, D. C.

DEAR SENATOR HUMPHREY: This is an estimate of the flood damage, through public works, in Marshall during our spring flood. This estimate was made by Mr. Armor, public works administrator of Kansas City, Mo., and with Mr. Bladholm, our city engineer.

The Army engineers, Mr. Cowan and assistants were here during the peak of our flood. They are also getting a report to you at once in connection with the river channel.

Please do what you can for us.

Very sincerely yours,

C. A. MCGUIGGAN, *Mayor.*

Estimated cost of damage to public works caused by flood of 1951

Streets:	
Remove mud and debris	$3,500
Clean and repair storm sewers	500
Replace 53,700 square yards 1-inch bituminous surface	18,810
Seal coat 75,400 square yards bituminous surface	7,540
Total estimated cost damage to streets	30,350
Sanitary:	
Pump rental	1,200
Clean and repairs to sewers	2,500
Total estimated cost damage to sewer system	3,700
Light, water, and heat:	
Repairs to office and warehouse	500
Repairs to heating system	2,500
Total estimated cost damage to light, water, and heat	3,000
Grand total estimated cost of damage to public works	37,050

WINONA, MINN., *July 26, 1951.*

Hon. HUBERT H. HUMPHREY,
United States Senate, Washington, D. C.

DEAR SENATOR HUMPHREY: Mayor J. Roland Eddie has asked that I give you information on the need for a flood-control survey at Winona, Minn.

You will find enclosed pictures of the flood damage at Winona during the April 1951 flood.

You will also find enclosed a map of Winona and vicinity upon which has been indicated the flooded areas and areas which could have been flooded during the high water in April of this year.

From a study of this map, it becomes apparent that Winona is built on low land which lies almost entirely surrounded by the waters of the Mississippi River and Lake Winona. The city of Winona has constructed some minor flood-control structures which, during a normal high-water stage of 13 feet, prevents the back-up of water into Lake Winona. This spring the flood stage was 17.35 feet and our

flood-control structures were entirely inadequate to protect the city from flood damage.

As indicated on the map, emergency flood-control dikes were thrown up at several points to protect the residential areas along Lake Winona. At the crest of the high water the river was 9.72 feet above the surface of Lake Winona and approximately 5 feet above Sarnia Street (Highway 61) where it parallels the north shore of Lake Winona.

It should be emphasized that these emergency dikes were constructed at locations where the work could be done quickly and many residential areas within the corporate limits could not be protected. It is our thought that the flood protective dike system should be constructed along the bank of the Mississippi and not as it is now, deep within the developed areas of the city.

The cost to the city of Winona in the April 1951 flood was very heavy as is indicated below.

Emergency dike construction and damage to public facilities	$36,551.53
Damage to Prairie Island Road	40,000.00
Damage to private property	371,448.47
Total	448,000.00

If the floodwaters had broken through the emergency dikes, the property damage would probably have been increased to about $900,000, and if the river crest had been 1 foot higher than we actually experienced, it would have been impossible to save a large part of the city from a complete flood disaster.

To me, it seems unreasonable to gamble on such a small margin of safety when the welfare of an entire city of 25,000 people is at stake.

The city of Winona has requested that the Corps of Engineers make a flood control survey of this area for the following reasons:

(1) Our engineering staff and equipment is not adequate to attempt a survey of this magnitude.

(2) Much of the flood-control work must be done outside the corporate limits of Winona and outside the area of the city council's authority.

(3) We believe that the Federal Government through the construction of the 9-foot channel-control structures has assumed some responsibility for the maintenance of dikes and other structures to prevent flood damage.

(4) We also believe that the Corps of Engineers have the best available engineers and facilities for the carrying out of a survey of this type.

We hope that the information contained herein will be of some value to you at the Senate hearing.

Very truly yours,

W. O. CRIBBS, *City Engineer.*

The situation this spring was so bad that I asked the President of the United States to declare the flooded portions of Minnesota "disaster areas" and allocate funds for flood relief under the terms of Public Law 875, Eighty-first Congress. My correspondence with him is as follows:

APRIL 10, 1951.

The Honorable HARRY S. TRUMAN,
The White House, Washington, D. C.

MY DEAR MR. PRESIDENT: A very tragic situation has developed in the State of Minnesota. We are again suffering from severe floods. At present these floods are in the south central and southwestern areas of Minnesota, affecting the counties of Nicollet, Blue Earth, Brown, and Lyons. These counties are heavily populated, predominantly rural but with several cities with populations of from ten to twenty-five thousand. Information has reached me that North Mankato now has 4,000 people homeless because of the floods.

I call this tragic situation to your attention because I am certain there will be need for the allocation of funds to relieve the suffering and to provide emergency rehabilitation for some of the public facilities. You will recall that a year ago we suffered similar floods, in the northern section of our State. It is entirely possible that we will have a recurrence of the flood conditions in the Red River Valley and the upper Mississippi again. The present floods are along the Minnesota River Valley and the Mississippi River in the southern part of our State.

I bring this to your attention in the hope that all the resources of the Federal Government may be mobilized to alleviate the suffering, to repair the damage, and to provide effective rehabilitation.

Sincerely yours,

HUBERT H. HUMPHREY.

THE WHITE HOUSE,
May 21, 1951.

Hon. HUBERT H. HUMPHREY,
United States Senate, Washington, D. C.

MY DEAR SENATOR HUMPHREY: Reference is made to my letter to you dated April 17, 1951, concerning the flood damage in the State of Minnesota.

A report on the extent of the damage has been received from the Community Facilities Service of the Housing and Home Finance Agency and, in accordance with recommendations contained therein, I have determined the floods occurring during April and May of this year in southwestern Minnesota to be of sufficient severity and magnitude to warrant disaster assistance by the Federal Government in that portion of the Minnesota River watershed adversely affected thereby. Also, I have allocated to the Housing and Home Finance Agency from the emergency fund for the President $50,000 to be expended by said Agency for alleviation of hardship and suffering caused by the floods.

I have advised the Honorable Luther Youngdahl, Governor of Minnesota, of the determination and allocation of funds.

Sincerely yours,

HARRY S. TRUMAN

The report on which the President based his decision is as follows:

MAY 9, 1951.

MINNESOTA FLOOD DISASTER

Raymond M. Foley, Administrator
Pere F. Seward, Community Facilities Service

In conformity with the procedure established for processing requests for disaster assistance under the provisions of Public Law 875, Eighty-first Congress, approved September 30, 1950, representatives of this agency have investigated damage resulting from floods in the Minnesota River watershed in the State of Minnesota. Gov. Luther W. Youngdahl requested on April 10, 1951, that the area of the Minnesota River and its tributaries be declared a disaster area and that a minimum of $100,000, Federal funds, be made available for repairs and rehabilitation.

After careful consideration and investigation the following recommendations are made:

(1) That the area included in the Minnesota River watershed be declared a disaster area by the President under the provisions of Public Law 875; and

(2) That $50,000 be allocated from the President's emergency fund, Public Law 583, Eighty-first Congress, to the Housing and Home Finance Administrator, for expenditure by the Community Facilities Service in such disaster area.

In support of the above recommendations, the following data are furnished to conform to the provisions of Commissioner's Memorandum No. 122 issued April 13, 1951:

(1) Governor Youngdahl has by telegram to the President dated April 10, 1951, requested disaster assistance and certified that the State of Minnesota will make available a substantial amount of funds for similar purpose.

(2) The Governor, the chairman of the Minnesota Civil Defense and Disaster Relief Commission, and other State and local personnel have accompanied the Community Facilities Service representative in inspections of the flooded area and furnished all available information.

(3) The State has appropriated, since the flood occurred, $550,000 for disaster relief, and such portion of this amount as is required will be utilized.

(4) Estimate of total damages not yet available.

(5) The following tentative estimates of cost of emergency repairs have been made:

	Private damage	Public damage [1]
A. City of Marshall	Homes, $400,000; business, $100,000.	Sanitary sewers, $3,700; storm sewers, $500; power plant, $1,100; streets, $29,850; municipal heating, $2,800; city hall, $500.
B. Lyon County	No estimate	Road grades, $50,000.
C. Redwood Falls	do	Clean-up, negligible.
D. Redwood County	do	Road grades, $12,000; bridges and approaches, $15,000.
E. City of Springfield	Homes, $6,000; business, $49,000.	Streets and park, $7,000.
F. City of New Ulm	No estimate	Negligible.
G. Brown County	do	Bridges and grades, $19,500.
H. Blue Earth County	do	Bridges and roads, $75,000.
I. North Mankato	1,275 homes flooded, damage not estimated.	Sanitary sewers, $100,000; streets, $25,000; water system, many breaks in mains; public buildings, all flooded, damage not estimated.
J. Mankato	No estimate	Nominal.
K. City of St. Peter	do	Power lines, $1,200.
L. Nicollet County	do	Roads and bridges, $10,000.
M. City of Henderson	Homes, $1,500	Negligible.
N. Sibley County	No estimate	Nominal.
O. Carver	Minor	Minor.
P. Chaska	85 homes, no estimates	Sanitary sewers, $10,000.
Q. Carver County	No estimate	Roads, $10,000.
R. Scott County	do	Nominal.

[1] Total public damage, $373,650.

(6) In recognition of the fact that the area covered by this flood is a fairly well to do area and a sizable amount of State funds is available, it is believed that $50,000 Federal funds should be made available.

(7) While it is true that sufficient State funds are available, even without supplementation by local funds, to meet all the preliminary estimates to damage of public property, it should be considered that the State of Minnesota has been among the first to acknowledge the State's responsibility in dealing with disasters and making State funds available. It is our belief that this attitude should be encouraged by providing some measure of Federal assistance rather than discouraging future appropriations by disclaiming such assistance.

If the disaster area is designated by the President and funds are made available, an agreement will be made with Governor Youngdahl whereby the State civil defense and disaster relief commission will review and pay all approved claims submitted to them by the various local governments and the Federal funds will be used to reimburse the State for certain specified items. For the most part Federal funds will be used to reimburse the State for the purchase of materials and payment for repairs made under contract.

PERE F. SEWARD, *Commissioner.*

I want to make it clear to the committee that floods are not a rare occurrence in Minnesota. The details on the next page show that there have been 10 floods in the past 5 years in my home State.

These are just a continuance of a historical pattern. Flooding at various stages occurs every year. Records of early floods are not complete but reliable reports do exist on the floods of 1874, 1880, 1888, 1896, 1897, and 1899. Very severe floods are recorded for July 1905 and April 1916. Other recent floods which have reached major proportions were in 1938, 1941, 1943, 1944, 1945. Thus it can readily be seen that floods are an annual threat to the welfare of the people of Minnesota.

The following charts show the frequency of floods at just one town, Aitkin, in Minnesota.

TABLE 10.—*Flood frequency during entire year, Mississippi River at Aitkin*

Percent chance of occurrence in 1 year	Frequency in years	Maximum stage in feet	Maximum discharge in second-feet (present rating)
1	100	17.3	14,000
5	20	16.1	12,500
10	10	15.4	11,300
20	5	14.1	9,320
50	2	10.9	6,550
100	1	3.8	2,420

TABLE 11.—*Flood frequency during agricultural season, Mississippi River at Aitkin*

Percent chance of occurrence in 1 year	Frequency in years	Maximum stage in feet	Maximum discharge in second-feet (present rating)
1	100	17.3	14,600
5	20	15.9	12,100
10	10	14.8	10,300
20	5	13.2	8,360
50	2	9.2	5,360
100	1	2.0	1,600

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Floods in Minnesota, 1946 to Date

Since 1946 Minnesota has been victimized by floods of record to the extent of 10 occasions. They may be listed as follows:

1946.—The Root River in January. Ninety thousand dollars property damage; again in June to the extent of $191,000 property damage.

1946.—Crooked Creek in June of that year. Property damages to the extent of $184,000.

1947.—April of that year the area of the Red River of the North suffered an extensive flood which cost two lives and caused $1,702,000 in property damage.

1947.—The Roseau River flood of June caused property damages of $507,000.

1948.—The Red River of the North in April and May had one of its major floods. This caused the loss of four lives and property damages to the extent of $18,701,000 (East Grand Forks area).

1948.—The Mississippi River in the vicinity of Aitkin in April and May overflowed sufficiently to cause damages amounting to $579,000.

1950.—April and May. Floods on the upper Mississippi River caused considerable damages, particularly in the vicinity of Aitken and the headwaters lakes. Property damages were estimated at $5,353,000. As a result of the same weather conditions, the Red River of the North overflowed 1,127,000 acres of land which cost five human lives and caused property damages to the extent of an estimated $32,670,000. This is the same flood which caused such spectacular damages at Winnipeg and other Canadian points in the Red River drainage basin to the extent of $300,000,000 in Canada.

1951.—During early April of this year the Minnesota, Redwood, and Mississippi Rivers were flood stages.

In the Minnesota River basin $3,000,000 in property damages were caused by flood waters. Some 5,000 persons were evacuated from the flooded areas in and near North and West Mankato.

One million dollars damage resulted from flood waters of the Redwood River, principally in the vicinity of Marshall.

July 21 to 22, 1951, due to excessively high precipitation of 4 to 7 inches and high winds, there were 6 persons at Veroca and at Zumbro Falls whose loss of life were attributed to flood conditions. Many hundreds of families were evacuated from Rochester, Elba, Rushford, Veroda, LaFarge, and other cities in the southeastern section of Minnesota. No valid estimates of property damages are as yet available.

Source: United States Army Corps of Engineers.

These floods caused as much damage in the past as they did this year. The following are statements of the damages they caused in certain communities:

49. *Average annual flood damages.*—The average annual flood damages in the portions of the Red River Basin given detailed consideration in this report are estimated to total $1,390,170 and include all flood losses evaluated. Both rural and urban damages have been based upon current values and prices (July 1947) so that estimated benefits would be on a common basis with estimated costs of measures necessary to provide the benefits. A summary of average annual flood damages for areas given detailed analysis is included in table 4.

TABLE 4.—*Summary of estimated average annual flood damages* [1]

Location:	*Total estimated average annual flood damages*
Red River of the North:	
Wahpeton-Breckenridge	$18,000
Fargo-Moorhead	166,200
Grand Forks-East Grand Forks	281,200
Mustinka River Basin	204,100
Otter Tail River Basin	141,810
Wild Rice (N. Dak.) River Basin	56,450
Lower Sheyenne River Basin (including Maple and Rush Rivers)	281,600
Wild Rice (Minn.) and Marsh River Basins	128,010
Goose River Basin	4,420
Sand Hill River Basin	86,940
Forest River Basin	21,440
Total	1,390,170

[1] Damages based on July 1947 price levels.

JULY 17, 1950.

Re flood damage, Cass County.

The GOVERNOR'S FLOOD DISASTER COMMITTEE,
State Capitol, St. Paul, Minn.

(Attention: Colonel Nelson.)

DEAR SIR: Inasmuch as I haven't had the time nor personnel to meet the request of individual estimates of damage to county and township roads, we do have a complete record to date of work performed on our county roads; this is, for each road and nature of work.

We realize our damage is small in dollars with regard to other counties but our damage is serious due to the small amount of funds we have to work with for routine operations.

The following is a summary of expenditures and estimates for completion.

County road expenditures to July 10, 1950:	
Labor and equipment, wash-outs and bridge labor	$13,790.02
Bridge replacement, materials	1,954.95
Bridge repair, materials	559.67
Total	16,304.62
Estimate to complete damage:	
County roads:	
1 bridge	7,500.00
Wash-outs	6,000.00
Township roads: Wash-outs	12,000.00
Total	25,500.00
Grand total	41,804.62

Please advise as to necessary reports to cover the above.

Very truly yours,

CASS COUNTY HIGHWAY DEPARTMENT.

Mahomen County, Minn.—Estimated flood damage, 1950

Roads	Bridges and box culverts	Portable culverts	Wash-outs	Road surface
State-aid	$2,900	$3,100	$925	$31,400
County-aid	3,025	7,760	4,975	46,735
Township	2,000	12,700	3,000	50,550
Total	7,925	23,560	8,900	128,685

Grand total, $169,070.

HIGHWAY ENGINEER'S OFFICE,
PENNINGTON COUNTY,
Thief River Falls, Minn., June 15, 1950.

From: Joseph Seidel, county engineer, Thief River Falls, Minn.
To: J. E. Nelson, brigadier general, the Adjutant General, chairman, St. Paul 1, Minn.
Subject: Final report on flood damage.

DEAR SIR: I hereby respectfully submit the following final report of flood damages in Pennington County:

Flood damages to townships and individuals:	
1. Road surfaces	$18,247.00
2. Road structures	3,086.00
Flood damages to commercial structures, River Valley, Minn.:	
1. Structures	2,400.00
Flood damages to the city of Thief River Falls, Minn.:	
1. Streets	322.50
2. Dam site	6,725.00
Flood damages to Pennington County highway system:	
Federal-aid secondary system:	
1. Road surfaces	10,205.00
2. Structures	None
State-aid system:	
1. Road surfaces	13,829.00
2. Structures	140.00
County aid system:	
1. Road surfaces	32,127.00
2. Structures	1,708.00
Summary of damages to Pennington County:	
1. Road surfaces	74,408.00
2. Road structures	4,934.00
3. Commercial structures	2,400.00
4. Streets	322.50
5. Dam site	6,725.00
Total	88,789.50

Yours very truly,

JOSEPH SEIDEL,
County Engineer, Pennington County.

Damage to Aitkin County farms, resorts, cabins, roads, bridges, and loss of crops and livestock caused by the overflowing of the Mississippi River and its tributaries

Damage to county roads, bridges, culverts, etc.:		
Culverts	$23,700.00	
Bridges	29,500.00	
Regraveling	70,200.00	
Wash-outs	55,100.00	
		$178,500.00
Number of townships affected, 30.		
Township roads, bridges, and culverts: Total cost		41,207.52
Roads: Total cost of repairing and regraveling roads		66,640.50
Public property damage:		
Aitkin County Fairgrounds	$20,000.00	
Cedar Brook Telephone Co	5,000.00	
Deerwood Telephone Co	3,000.00	
		28,000.00
Private property damage:		
Buildings, fences, equipment, etc	1,080,265.00	
Crop restoration	165,360.00	
Lake-shore property	140,000.00	
		1,385,625.00
Damage to villages, Aitkin:		
Public property damage		56,300.00
Private property damage		56,000.00
		1,812,273.02
Evacuated families, village and rural		160
Livestock	head	1,325
Fowl		5,000
Cropland flooded (24,420 acres or 21½ percent total area flooded)	farms	407
Total land flooded (179 square miles)	acres	114,560
Loss of livestock and fowl		900
Livestock and fowl sold because of the flood		726
Allocated from Federal funds for repairing township culverts and bridges		$24,300.00
Red Cross:		
Rescue and transportation		3,170.90
Food and clothing and other maintenance		2,648.01
Home repairs		20,298.59
Purchase of furniture		6,154.58
Medical care		89.18
Farm supplies, hay, and feed		3,667.51
Occupational supplies		440.95
Administrative expenses		359.88
Total cost		36,829.60
State allocation for flood-relief purposes, subsistence only based on need		6,000.00
Total tax levy 1948 collectible in 1949		423,824.93
Total levy for flood area 1948 collectible in 1949		224,695.10
Total collected in flood area		206,091.55

Submitted by Aitkin County Disaster Committee. Mr. Vernon Quaintance and Mr. Vernon Butler acting in an advisory capacity. Compiled by L. N. Haedt, secretary.

AMOUNT OF FLOOD DAMAGE TO PRIVATELY OWNED RESIDENTIAL PROPERTIES IN THE CITY OF EAST GRAND FORKS, MINN., CAUSED BY THE 1950 RIVER FLOOD

The peak of the 1950 flood, as measured by the river gage, was 45.79 feet on May 12, 1950, which is the highest since 1897 when the reading was 50.2 feet computed to the same gage.

One important factor in the 1950 flood is the duration of the flood; that is, the length of time the water stood on the property. The damaging level in East Grand Forks begins at 38 feet. In 1950 the river went to 38 feet on April 17 and went down to 38 feet on May 26, which is a flood period of 39 days. In contrast, the 1948 flood, which was the next highest since 1897, was above the 38-foot level for 11 days.

The following tabulation shows the number of houses in the city damaged by the flood of 1950 (figures in one classification are not shown in any other classification; to get a total, add):

(1)	Houses water above the ground floor	181
(2)	Houses with water on joists but not over floor	19
(3)	Houses with water above the ground floor with furnished apartment in basement	2
(4)	Houses with water on joists with furnished apartment in basement	4
(5)	Houses with water up to foundation wall with furnished apartment in basement	3
(6)	Houses, known as basement houses, filled with water	7
(7)	Houses with water touching foundation wall above the ground	74
(8)	Houses in the immediate proximity of water with water in basement if not plugged and pumped, or kept dry by pumping	35
(9)	Our Saviors Lutheran Church sandbagged, successful	1
(10)	Houses sandbagged successfully	4
(11)	Houses floated a distance away from foundation	5
(12)	Houses outside the flood area but adjoining it and affected by water through sewer and required to plug sewer and pump leaks	20

(1)	181, at $2,000	$362,000
(2)	19, at $1,000	19,000
(3)	2, at $2,400	4,800
(4)	4, at $1,400	5,600
(5)	3, at $1,000	3,000
(6)	7, at $700	4,900
(7)	74, at $600	44,400
(8)	35, at $125	4,375
(9)	1, at $300	300
(10)	4	15,000
(11)	5	7,500
(12)	20, at $30	600
	Total	471,475

A. G. RAND,
City Clerk, City of East Grand Forks, Minn.

JUNE 16, 1950.

AMOUNT OF FLOOD DAMAGE TO PRIVATELY OWNED COMMERCIAL PROPERTIES IN THE CITY OF EAST GRAND FORKS, MINN., CAUSED BY THE 1950 RIVER FLOOD

The peak of the 1950 flood, as measured by the river gage, was 45.79 feet on May 12, 1950, which is the highest since 1897 when the reading was 50.2 feet after being translated to the present river gage. One important factor in the 1950 flood is the duration of the flood, that is, the length of time the water stood on the property, forced its way through the sewers and leaks in the sewers, and seeped through the ground. The pumpage period was prolonged.

Another factor in the 1950 flood is that the river receded 8 feet from its first crest and then immediately rose 10 feet to the second and higher crest. During the time of the 8-foot recession it was the belief of all that the flood was over and as a result clean-up operations were started, merchandise replaced in basements, and sandbags removed. The second crest caused a duplication of the expense.

The following tabulation shows the damage to 30 commercial buildings and contents caused by the flood of 1950:

Merchandise: Loss, damage, storage, and moving costs	$8,706.00
Furniture and fixtures	2,551.20
Building damage, repairs and painting (this does not include structural damage to 11 buildings)	15,465.00
Loss of business	34,612.30
Damage to furnaces, water heaters, motors, etc	1,336.00
Sandbagging	2,710.00
Miscellaneous	1,432.90
Pumping costs	9,944.20
Labor not included in above items	2,991.96
Six buildings, information not available, estimated	9,600.00
Total	89,349.56

The damaging level in East Grand Forks is 38 feet. In 1950 the river went up to 38 feet on April 17 and reached the maximum crest of 45.79. The river went down to 38 feet on its final recession on May 26, which is a flood period of 39 days. In contrast, the 1948 flood which was the next highest since 1897, was above the 38-foot level for 11 days.

A. G. RAND,
City Clerk, East Grand Forks, Minn.

NORMAN COUNTY DEPARTMENT OF ROADS,
Ada, Minn., July 15, 1950.

Hon. HUBERT H. HUMPHREY,
Senator, Washington, D. C.

DEAR SENATOR HUMPHREY: I have prepared for your consideration a summary of losses due to flood damage in Norman County during the months of April and May 1950 and the recurring flash flood of the week of June 25 caused by unusually heavy rains:

F. A. S. system	$5,355
State-aid roads	3,125
County-aid roads	67,805
Township roads	31,445
Total, roads and bridges	107,730

I would assume the losses to ditches, which includes private bridges, erosion, silting, etc., to be conservatively estimated at $15,000.

Private losses are difficult for me to estimate. The most outstanding is that of Mr. Askelson, who has a 320-acre farm directly south of Ada, which has been damaged at least to the extent of $10,000, caused mostly by erosion, which has cut several channels throughout the entire length of the farm and deposited river sand on much of the remainder, rendering most of the farm of very little value for cultivation.

The figures that I have quoted total $132,730. This added expense becomes a burden upon the local governmental units and I do hope that this gives you a composite picture of what has occurred during the 1950 floods.

It has been estimated by the Federal Corp Insurance Corporation that crop losses due to this afore-mentioned flood covers approximately 90,000 acres causing approximately $7 per acre crop loss which would amount to $630,000, of which 10 to 15 percent is covered by insurance.

We have some pictures with us to substantiate some of the figures which we have estimated.

Yours very truly,

LLOYD N. NELSON,
County Highway Engineer.

MOORHEAD, MINN., *May 2, 1950.*

The BOARD OF COUNTY COMMISSIONERS OF CLAY COUNTY,
Moorhead, Minn.

GENTLEMEN: We herewith submit a map showing the location and extent of damages caused by recent excessive storms and floods. The estimated total damages are $116,773, consisting of $70,500 to county roads, $35,993 to township roads, and $9,380 to city and village streets.

Detailed estimated quantities and costs for each item are on file in my office.

Respectfully submitted.

ORVILLE A. HUNT,
Clay County Highway Engineer.

MOORHEAD, MINN., *May 29, 1950.*

Re flood relief for Red River Valley.

Hon. HAROLD C. HAGEN,
Congressman, House of Representatives, Washington, D. C.

DEAR CONGRESSMAN: The Minnesota Civil Defense and Disaster Relief Commission appointed a Clay County Disaster Relief Committee, of which I am a member, and asked us to gather all of the damages caused in Clay County by the 1950 flood. All of these were estimated figures on the cost of replacement and restoration of the damages, and the committee felt were a fair estimate of the flood damages.

Following are the figures as submitted by this committee to the Minnesota Civil Defense and Disaster Relief Commission:

Clay county roads, bridges, wash-outs, etc	$70, 500. 00
Township roads, bridges, wash-outs, etc	35, 993. 36
Municipal:	
City of Moorhead, sewer, streets, etc	5, 800. 00
Village of Dilworth, streets	3, 080. 00
Village of Hawley, streets	500. 00
Village of Georgetown, bridge	1, 000. 00
Individuals:	
City of Moorhead, 60 homes flooded	12, 000. 00
Clay County:	
35 individual claims	33, 560. 50
Wells flooded (individuals)	500. 00
Total	162, 933. 86

These are fairly good figures and can be substantiated by claims on file in my office. Of the claims I have, very few can qualify for relief, and the relief angle doesn't amount to a great deal, but we would like to give you these figures so that you can have a fairly good idea of the amount of damages caused directly by the flood. Quite a good deal of the seeding is in now, but it has been a struggle for the farmers to get their crops in, and some of them won't plant at all.

Respectfully yours,

WINTON D. JOHNSON,
Clay County Auditor.

Other true losses which these figures do not include are the loss of wages to employees, the loss of business during the flood periods, and though difficult to determine, we cannot forget the loss to the county and the State through tax delinquency, land forfeiture, and the forced sale of unfinished livestock.

This damage is occurring in one of the most fertile areas in this country. The following chart shows the relationship of this area to the rest of the country as far as certain crops are concerned:

Production in 1944 of certain crops—Minnesota and North Dakota

[Figures from Department of Commerce, Bureau of Census]

RANK OF MINNESOTA AND NORTH DAKOTA COUNTIES OF RED RIVER VALLEY AMONG 10 HIGHEST WITHIN THE UNITED STATES

	County	State	Rank
Oats	Otter Tail	Minnesota	First.
Do	Polk	do	Tenth.
Barley	Cavalier	North Dakota	Sixth.
Do	Ramsey	do	Ninth.
Do	Walsh	do	Seventh.
Flax	Roseau	Minnesota	Ninth.
Potatoes	Walsh	North Dakota	Fifth.
Do	Grand Forks	do	Tenth.
Alfalfa	Otter Tail	Minnesota	Fourth.

The following figures show the amount of acreage in just one section of the State that is inundated by annual floods:

Pertinent information concerning cultivated areas in the Red River Valley

Area of Red River Valley (acres)	9, 000, 000
Area under cultivation (acres)	7, 200, 000
Area subject to overflow (acres)	2, 000, 000
Area in cultivation that is subject to overflow (acres)	1, 800, 000

Statistics of Aitkin County's farm situation are as follows:

TABLE 3.—*Farm, crop, and livestock statistics, Aitkin County*

Item	Unit	1940	1935	1930
Approximate area in farms	Acre	308, 647	342, 680	286, 650
Proportion in farms	Percent	26. 44	29. 40	24. 60
Average size of farms	Acre	108. 0	113. 8	116. 2
Average value of farm lands and buildings per farm	Dollar	2, 957	2, 216	3, 904
Average value of farm land and buildings per acre	do	19. 05	19. 47	33. 60
Approximate value of livestock sold or traded	do	[1] 359, 270		[2] 459, 161
Approximate value of livestock products sold or traded	do	[1] 920, 199		[2] 1, 181, 211
Approximate value of all crops sold or traded	do	[1] 230, 923		[2] 213, 284

[1] Based upon data obtained in 1939.
[2] Based upon data obtained in 1929.

That floods adversely affect the economic life of a community can easily be seen from the following statistics:

AITKIN COOPERATIVE CREAMERY ASSOCIATION,
Aitkin, Minn., April 27, 1951.

To Aitkin County Flood Control Association:

I am writing you in regard to the necessity of the diversion channel to maintain our economy in agriculture in Aitkin County.

As manager of the Aitkin Cooperative Creamery, I refer to the continual decline in agricultural products, especially dairy products, in the past years because of flooding. Following is a summary of the total production trend since 1943, which I feel is self-explanatory.

In 1943 we produced 1,075,762 pounds of butter.
In 1944 we produced 972,250 pounds of butter.
In 1945 we produced 872,129 pounds of butter.
In 1946 we produced 828, 423 pounds of butter.
In 1947 we produced 814,883 pounds of butter.
In 1948 we produced 772,606 pounds of butter.

AITKIN CIVIC ASSOCIATION, INC.,
Aitkin, Minn., April 27, 1951.

Mr. VERN QUAINTANCE,
President, Aitkin County Flood Control Association,
Aitkin, Minn.

DEAR MR. QUAINTANCE: With reference to your inquiry for information on the general economic condition as it applies to the Aitkin area. All the information I have here would indicate a crippling falling off of business, both in the village of Aitkin and on surrounding farms. I am basing my estimate on the following:

Postal receipts at Aitkin:	
Calendar year, 1949	$39, 494. 46
Calendar year, 1950	38, 328. 48
Loss	1, 165. 98
Dairy products:	
Butterfat sold to the two local creameries:	*Pounds*
1949	865, 451
1950	796, 095
Loss	69, 356
Bank deposits:	
Total deposits in banks—published report:	
May 5, 1950	$6, 095, 744. 95
April 9, 1951	5, 544, 709. 58
Loss	551, 035. 37

Aitkin County, as you are doubtless aware, is perhaps the leading turkey producing county in the State. I have been busy for several days compiling information on production but have not completed my survey. Indications, however, point to a falling off in turkey production as well as all other agricultural products. In our opinion a great part of this condition is brought about on account of the highwaters of the Mississippi River flooding good agricultural lands, which is having its discouraging effect among those engaged in agriculture.

Yours very truly,

ALEX HUDDLESTON,
Executive Secretary.

There are efforts being made to correct this situation in Minnesota. As it stands now, if this appropriation is not included in this bill, all of these proposed improvements will be affected. The following chart shows the projects that will be affected:

The following projects have been assigned to District Office and authorized by either the Senate or the House. They include surveys, review reports, preliminary examinations. The Washington office does not know exactly which surveys, etc. will go ahead because there is a little reserve in the District Office that can be used, but the House action will affect almost all of them in some way. Also, there is the President's criteria which stated the project must be essential to present national emergency.

NAVIGATION STUDIES

Channels in Lake Minnetonka
St. Croix River mouth to Taylors Falls
Headwater reservoir
Mississippi River comprehensive small boat harbor report
Twelve-State waterway study on the Mississippi River
Study at Winona
Minnesota River for 9-foot channel

FLOOD CONTROL

Roseau River
Root River
Comprehensive study of Mississippi River above Missouri river
South Fork of the Crow River
Flood Control Study of Minnesota River
Snake River

Ruffy Brook and Lost River
Red River of the North
White Water River

INTERIM REPORTS AUTHORIZED FOR FLOOD SURVEYS

Mankato and North Mankato
Winona

I should like to communicate to the committee my earnest desire that they replace the survey appropriation in the Civil Functions Act for 1952. I also hope the committee sees fit to take from the bill that proviso that prohibits any of the appropriations from being used this year. Anyone familiar with the way the Corps of Engineers work know that they would need some of this money to finish projects they have now in progress. In connection with this I would like to submit the following correspondence for the consideration of the committee.

UPPER MISSISSIPPI WATERWAY ASSOCIATION,
Minneapolis 1, June 29, 1951.

Hon. H. H. HUMPHREY,
United States Senator,
Senate Office Building, Washington, D. C.

DEAR SENATOR: Please read this letter very carefully relating to the extension of the 9-foot channel to the north city limits of Minneapolis.

It is extremely unfortunate that the Appropriations Committee of Congress did not include any appropriation at all for the subject project in the fiscal year 1952. I have conferred with Congressman Walter H. Judd, and others, and the apparent reason for this lack of appropriation seems to be that the committee was advised that there were sufficient unexpended funds in the hands of the Corps of Engineers for the fiscal year of 1952 for work on the upper harbor. However, I believe this to be very unfortunate, for unless the Corps of Engineers has "appropriated funds" at least a year in advance, they are unable to lay plans for such important and continuing projects as the extension of the 9-foot channel. It has always been generally conceded, in contemplating similar projects, throughout the United States, that when a project is started, a sufficient balance of funds are placed on hand for future planning and certain contingencies which may arise. In other words, it is very difficult for the Corps of Engineers, or even the contractor employed, to anticipate the time necessary for the completion of the work. For example, when conditions are ideal, the work may proceed without delay and the appropriated funds in the hands of the Corps of Engineers may be exhausted prior to the end of the fiscal year. In the last 2 or 3 years, appropriations have been unusually late in arriving at the disposal of the Corps of Engineers due to the fact that work proceeded so rapidly and funds were expended at such a rate that periods of inactivity result. It is this situation that I wish to call to your attention. It is our sincere hope that the Senate Committee will include in its appropriation for the fiscal year 1952 at least a token sum of $500,000 to insure the continuity of this work. Prudence and foresight dictate this course of action so that excessive cost to the Federal Government may be avoided.

Another important factor is the financial commitments assumed by the city of Minneapolis which total about $2,500,000. This amount includes $1,100,000 in actual cash contributed to the Federal Government for Minneapolis' part of certain work costs; the remainder being allotted to expensive bridge changes in the city of Minneapolis, which have been actively continued in the program. These bridge changes will be completed, by the way, even in advance of the Government work. Early completion of these bridge changes was deemed expedient in order to permit the Government's dredging operations by means of floating equipment in the two upper pools of the project. The city of Minneapolis is being put to considerable effort and expense to keep abreast of the original construction schedule. (In this regard, the construction schedule was somewhat retarded due to the high flows in the river in the early spring of 1950 and 1951.) However, the contractor for the Government will very likely get back on schedule, and may even better the schedule, since the high flow has not receded. As I recently passed over the current construction, I observed that the contractor has now completed the "coffer dam" and is beginning to pour concrete. This work is proceeding rapidly, and is, I believe, in advance of anticipated plans. This would seem to emphasize the possibility that the present funds may be expended prior to the end of 1952.

It is therefore of extreme importance that the Senate Committee on Appropriations make a token appropriation at this time of $1,500,000 to provide the Corps of Engineers with reserve funds to carry them into the fiscal year of 1953, and further, to demonstrate to the city of Minneapolis that the project will be carried to completion. This action would show good faith as to date Minneapolis had expended more funds up to the present time than has the Federal Government. We all appreciate the seriousness of the present economic condition of the Federal Government. We all appreciate the importance of economy. It is strongly felt, however, by the proponents of this project as well as by the officials of the city of Minneapolis that this important project must be continued. The city of Minneapolis has carried out its end of this agreement and borne its share of the burden in good faith. A relatively small amount is requested for the fiscal year of 1952 in order to make certain that the work will not be stopped for any period of time for lack of funds. It would be false economy to deny such a relatively small amount (particularly as it relates to the over-all omnibus appropriation bill) and thereby to jeopardize the continuity of this project because a temporary stoppage or delay would cost far more than the immediate saving.

It is therefore urgently requested that this committee of the Senate reinsert an amount of at least $1,500,000 for the year 1952 for this essential project.

Very truly yours,

A. D. STRONG, *Secretary.*

JULY 19, 1951.

Mr. W. C. RIPLEY,
Wild Rice-Marsh River Drainage and Conservancy District,
Ada, Minn.

DEAR MR. RIPLEY: Many thanks for your communication with regard to the appropriations for the completion of the Wild Rice and Marsh River drainage projects.

The Senate Appropriations Committee is presently holding hearings on the civil functions appropriations bill and I intend to make full representation for the State of Minnesota. The Minnesota projects will be discussed after July 27.

I appreciate having the information that you have submitted to me concerning these projects, and I shall be happy to present it for consideration of the committee. You may count on my every effort.

Sincerely yours,

HUBERT H. HUMPHREY.

ADA, MINN., *June 25, 1951.*

Senator HUBERT HUMPHREY,
Washington, D. C.:

I urge you to use all possible effort in getting funds reinstated in civil function appropriation bill for use in completion Marsh River drainage project. Army engineers have completed survey, viewers' report accepted by court and right-of-way has been paid for by the drainage district.

W. C. RIPLEY.

WILD RICE-MARSH RIVER DRAINAGE
AND CONSERVANCY DISTRICT,
Ada, Minn., June 26, 1951.

Senators EDWARD J. THYE and HUBERT HUMPHREY,
Washington, D. C.

DEAR SENATORS THYE AND HUMPHREY: I sent you the following telegram yesterday:

"I urge you to use all possible effort in getting funds reinstated for use in completion of Marsh River drainage project—Army engineers have completed survey—viewers report accepted by the court and right-of-way paid for by the drainage district."

If you will check the records regarding this project you will find that the Government had appropriated a sufficient amount of funds for the cleaning and straightening of the Wild Rice River and the Marsh River in Norman County. The necessary surveys have been completed by the Army engineers. A hearing was had on both projects in our district court and the viewers' reports were accepted and approved by the court. Our district was ordered and authorized to obtain the necessary right-of-way, which has been done and paid for. Our board of county commissioners have made the necessary levy and has spread the assess-

ments for the raising of funds for the local sponsor's share of the expense in both projects and many of the assessments have already been paid by corporations, the State of Minnesota, the city of Ada, Norman County, and local farmers.

The Army engineers entered into a contract for the work on the Wild Rice River and which work is progressing very nicely and should be completed late this fall or early next spring. It seems when this contract was let or shortly thereafter, the funds intended for use in the Marsh River project were diverted by the Government for use at some other point in the United States. The contraction the Wild Rice River was obtained at a considerable less sum than had been calculated by the Engineers and it would seem that the overage should have been sufficient to complete the job on the Marsh River.

In view of the fact that the contractor is now on the job in the area with his equipment, the Government would be in an advantageous position in obtaining a low bid on the work in the Marsh River if the contract could be let for that project before the completion of the work on the Wild Rice River. Certainly our district was given to understand that the work on the Marsh River would follow immediately.

With the conditions as stated you can readily understand that it has placed the officers of our district and our board of county commissioners in rather a precarious position, especially in view of the fact that we have paid for the necessary right-of-way and that the assessments have been levied against the properties in the district and many of these assessments already having been paid for the benefits which we are not so sure of getting for the property owners.

I am sending a copy of this letter to Congressman Harold Hagen and I hope you gentlemen will get into a huddle and that you will find it possible to get us out of this hole.

Assuring you of our appreciation for your efforts in the past and your attention to the matter at this time, I am

Yours very truly,

W. C. RIPLEY.

UPPER MISSISSIPPI WATERWAY ASSOCIATION, INC.,
Minneapolis 1, June 20, 1951.

Hon. H. H. HUMPHREY,
United States Senator, Senate Office Building, Washington, D. C.

DEAR SENATOR: I understand that the Senate Committee on Appropriations will conduct limited public hearings to begin soon. As I have written you previously, I think it is extremely important that I appear before this committee to urge funds for Keokuk and proper funds for maintenance of the upper Mississippi River.

As you no doubt know, the Committee on Appropriations of the House of Representatives reported to the House the Civil Functions Appropriation Act, 1952. The $162,860,500 proposed for the maintenance and improvement of existing rivers and harbor works is $57,379,500 or 35.2 percent less than the amount of $220,240,000 requested in the budget estimate. This constitutes a reduction of a little over $24,000,000 below the amount appropriated for the current fiscal year in the omnibus Appropriations bill of 1951.

As you also no doubt know, the $97,860,500 provided in H. R. 4386, and the $149,405,000 in the budget estimate for new construction includes only $90,000 for Mississippi River between Missouri River and Minneapolis, Minn. (excluding St. Anthony Falls and lock 19). The budget estimate included an item of $1,600,000 for the above which included St. Anthony Falls and other features. The district engineer in St. Paul is very disturbed about this unfortunate situation, and with the ever-increasing tonnage on the upper Mississippi River and the lack of funds for new construction and maintenance this might prove to be very serious.

It is extremely important that every effort be made by the Senate Committee on Appropriations to include an item for Keokuk and an item for proper maintenance, operation and care of the upper Mississippi River; also an item for the continued construction of the extension of the 9-foot channel to the north city limits of Minneapolis.

I would appreciate very much if you would let me know when it will be time for me to come to Washington to appear before this committee, and if possible, try to arrange a time so that I will not have to wait around in Washington from day to day to attend the hearing.

In studying the reduction of the budget estimates (copy attached) relating to funds for new construction throughout the United States, it appears that our part of the country is forgotten. This entire situation I will want to discuss with you.

Please advise me as to the dates of these hearings as soon as possible so that I can make my plans.

Very truly yours,

A. D. STRONG, *Secretary.*

Congress has just appropriated $25,000,000 for relief from flood damages. It is extremely difficult to communicate to the people of this country, especially those in the flood ravaged sections, the logic and consistency in appropriating $25,000,000 for relief from floods and then refusing to appropriate only $5,000,000 in an effort to prevent future floods. These people feel, and rightly so, that Congress should make an all-out effort to prevent floods from ravaging the people and land of this great country.

I have presented for the consideration of this committee my views concerning the restoration of the civil functions bill for fiscal year 1952 of the money for flood surveys. I have shown the damages caused by floods in my home State of Minnesota and the effect the loss of this money will cause. I earnestly hope the committee will see fit to support action that will result in the saving of lives and property and the eventual conquest of the flood menace. I feel that restoring the money for flood surveys is a positive measure in this direction and a measure that will be a service to the people of this country.

THE AMERICAN NATIONAL RED CROSS

NATIONAL HEADQUARTERS

Special report on disasters for Senator Hubert H. Humphrey, of Minnesota

North Dakota-western Minnesota floods of April 1950 (including the Red River floods):	
Number of counties affected in North Dakota	19
Number of counties affected in Minnesota	5
Number of families assisted by Red Cross	4,016
Number of homes destroyed	27
Number of homes with major damage	804
Number of homes with minor damage	2,768
Number of families assisted with mass care	3,714
Red Cross expenditures for mass care	$78,743.34
Number of families assisted with individual care	802
Red Cross expenditures for individual care	$154,339.64
Total Red Cross expenditures	$233,082.98
North Central States floods of March 1951 (operation still in progress):	
Number of counties affected in Minnesota	18
Number of counties affected in Iowa	6
Number of counties affected in South Dakota	3
Number of counties affected in Wisconsin	2
Number of counties affected in North Dakota	1
Estimated number of families to be assisted by Red Cross	3,554
Number of homes destroyed	5
Number of homes with major damage	909
Number of homes with minor damage	2,026
Estimated number of families to be assisted with mass care	2,514
Estimated Red Cross expenditures for mass care	$44,573.00
Estimated number of families to be assisted with individual care	2,141
Estimated Red Cross expenditures for individual care	$376,297.00
Estimated total Red Cross expenditures	$420,870.00
Statistics on Blue Earth and Nicollett Counties which are included in this operation:	
Estimated number of families to be assisted	1,500
Number of homes destroyed	1
Number of homes with major damage	350
Number of homes with minor damage	600
Estimated number of families to be assisted with mass care	1,200
Estimated Red Cross expenditures for mass care	$19,079.00
Estimated number of families to be assisted with individual care	1,000
Estimated Red Cross expenditures for individual care	$189,500.00
Estimated total Red Cross expenditures	$217,579.00

First survey report on Minnesota-Wisconsin windstorm and floods of July 1951:
5 counties affected, 2 in Minnesota and 3 in Wisconsin
6 dead
67 injured
13 hospitalized
1,550 families affected
18 homes destroyed
115 homes with major damage
425 homes with minor damage
Estimated number of families to be assisted by Red Cross, 250
Estimated Red Cross expenditures, $150,000

MAX W. ROTE, Jr.,
Assistant National Director Disaster Services.

THE AMERICAN NATIONAL RED CROSS

NATIONAL HEADQUARTERS

Summary of Kansas-Missouri-Oklahoma-Illinois floods, 9 a. m., July 27, 1951

Midwestern area has provided the latest summary, by counties and States, on the present flood situation. The following is a recapitulation of statistics for the four States as of this date:

State	Families affected	Homes destroyed	Homes damaged	Major damage	Minor damage	Actual registration	Estimated final registration
Kansas	41,745	1,569	19,053	5,338	13,715	13,839	16,485
Missouri	8,475	51	2,992	----------	----------	2,292	3,475
Oklahoma	1,760	50	710	330	360	428	1,015
Illinois	666	1	176	----------	----------	81	245
Total	52,646	1,671	22,931	----------	----------	16,640	21,220

MAX W. ROTE, Jr., *Disaster Services.*

TOTAL AMOUNT FOR SURVEYS AND STUDIES

Chairman MCKELLAR. Let me ask this question. How much did the budget recommend?

Senator HUMPHREY. The total amount that was recommended for navigation studies, flood control and interim reports and all contingencies under that item was in the amount of $5,700,000 for the Corps of Engineers Rivers and Harbors, flood control, preliminary examination, survey program and flood control contingencies.

Chairman MCKELLAR. No construction in that?

Senator HUMPHREY. No construction; no.

Chairman MCKELLAR. But it is a budget estimate?

Senator HUMPHREY. That is correct. I have in my documentation a letter from the Corps of Engineers signed by Colonel Hiatt that sets forth material in some detail.

I also have a statement on floods in my area about which we are speaking today. I would like for a moment, since we have a very patient and helpful committee, to make some note of these flood damages.

Everyone has been deeply concerned about what has happened in St. Louis and Kansas City. I was one of those who joined the other members of this committee in supporting the appropriation for them, but I think when the mayor of North Mankato testifies he will show

that while it is not as big as St. Louis, in proportion to the number of people and property located there the flood was every bit as extreme or grievous as it was in St. Louis or Kansas City. It literally wiped out a community, at least for a period of time. My colleague, Senator Thye, remembers very well his visit to the north part of our State a year or so ago.

Senator THYE. If I may add to what my colleague just stated, both of us visited East Grand Forks and Crookston jointly a year ago. I personally visited North Mankato when the flood waters were just receding and I could note all the damage that had been done at North Mankato. I flew that Sunday afternoon down over the Minnesota River to Minneapolis where it branched to the Mississippi and from there on down the Mississippi River as far as Winona. I could see the damage to South St. Paul as well as to all the dwellers along the banks of the Mississippi going down to St. Paul.

FLOOD DAMAGE

I stated here the other day, Mr. Chairman, when we were discussing the devastation of the flood at Kansas City and the area around both the Missouri and the Mississippi that wherever a flood strikes the individual who is in the flood will feel the devastation just as badly as the individual in any flood.

We saw a young veteran who had returned from the war, who had invested every penny he had, borrowed and obligated to the maximum of what he could, then he saw his home just nicely completed, then the waters came and the waters were half-way up on that dwelling, the floors buckled and the doors, and the property in itself was so damaged that the repair expense would be beyond what that young man could afford. Then the water had just utterly washed the earth away from the foundation and the foundation had caved in, some parts caved out, and the house sets at an angle on a portion of the foundation. When you saw that, then you knew that the devastation had hit that young man just as much, even though he was alone, as if it had been a hundred or a thousand families that had been with him, because the loss to him or the loss to any man or person himself who is in such a flood area is just as great and just as grave.

We could go on and enumerate what we saw at Crookston and at East Grand Forks and at Aitkin a year ago. It was severe in those communities and those persons will not come out of it for many and many a year to come.

I wanted to add that. Also I submitted to the committee on the 12th of July the statement of what the expense had been in Crookston and at East Grand Forks as well as Aitkin and North Mankato in order that we might support the people's request for assistance from those areas that had suffered.

Senator HUMPHREY. Mr. Chairman, just to supplement what my colleague has said, we are not at this point asking for sums of money for construction purposes in this particular instance. We are asking for an opportunity to survey what can be done to prevent a recurrence of this very devastating situation.

I have in my prepared statement here a listing of the floods in Minnesota from 1946 to date. Since 1946, according to the United

States Army engineers, we have been victimized by floods on 10 occasions in this State.

Senator STENNIS. Since when?

Senator HUMPHREY. Since 1946, 10 floods. That does not mean that all of them have been in the same place. Nevertheless, there have been recurrences in two or three areas time after time.

For example, I have in 1946 the Root River in January of that year; the Root River again in 1949 went over its banks and flooded.

Then we had the situation in the Aitkin area that Senator Thye has referred to, and that has happened twice, and it almost happened again this last year.

We have had this same thing at East Grand Forks on Red River of the North where in the last 5 or 6 years we have had three or four floods, three major floods and one of minor consequence.

I make note of that in my statement, also with letters here from the Corps of Engineers giving us an evaluation of damages; a letter from my friend here, the Mayor of North Mankato, Mr. Wollam; a letter from the city clerk of Springfield, Minn., with the estimate of the damages of the flood there in the past year; a letter from the mayor of Mankato, Minn., and the estimate of the damages; a letter and telegram from the mayor of Marshall, Minn., with an estimate of damages in that particular area; and then I have a letter from the Mayor of Winona, Minn., with an estimate of damages in that particular area; also some correspondence with the President in reference to the emergency fund to get a little emergency assistance; and then an extended statement by the American Red Cross outlining the emergency assistance which the Red Cross has so generously given. We are deeply indebted to the Red Cross for what they did for us during these flood conditions.

I want to make note of one other matter, that nowhere in this testimony of mine do I refer to substantial sums of money that the State itself has put up. We have noted the emergency funds from the President, we have noted the American Red Cross funds, but the State of Minnesota through the Governor's office and legislature has appropriated funds for relief of the victims of the flood. We are not seeking relief in the sense of a capital R. We are seeking the kind of engineering program that will prevent this from taking place again.

Mr. Chairman, if you will permit me, I would like to present right now Mr. Wollam, the mayor of North Mankato. The last time I saw him he was not in half as cheerful or friendly a mood. I think it was about the time that Senator Thye saw him and he was wondering what we were going to do to get him help.

STATEMENT OF H. C. WOLLAM, MAYOR OF NORTH MANKATO, MINN., ACCOMPANIED BY FRANK J. MAGNUSON, CITY ENGINEER

SURVEYS AND STUDIES OF FLOOD CONTROL PROJECTS, MINNESOTA

Mr. WOLLAM. As mayor of North Mankato, with my engineer, we certainly appreciate this opportunity to appear before you. I am going to talk primarily of people and nothing of the commercial district whatsoever, strictly the residential area.

I think it might be well with my engineer to show you this map that we have. It will take only a minute. It will show you the exact extent of our flood.

Senator HOLLAND. How large is your town?

Mr. WOLLAM. Five thousand. The population in the census of 1950 was 4,792. Since that time it has increased to slightly over 5,000.

Senator HOLLAND. We have heard talk of Mankato and North Mankato.

Mr. WOLLAM. Mankato is this side of the river, North Mankato is this section that you see in the red.

Will you explain this and the depth of the water?

Mr. MAGNUSON. As the mayor said, Mankato lies on the east side of the Minnesota River and the city limits are designated by this heavy black line, and the city of North Mankato, the outline of which is the city limits, is this heavy line. The Minnesota River separates the two cities on the south. It flows east and then north along the east city limits of North Mankato.

We have shown in a dotted line that on the west side of the river and on the east side of the river the area which was flooded on April 7 to April 9. The shaded area in blue shows the extent of the flood. This distance here, which is indicated as 1 mile, extends from here to there. That will give you a rough idea of the extent of the flood. This way it is about 3 miles in length.

Senator HOLLAND. North and south?

Mr. MAGNUSON. Yes; that is correct. The area of Mankato is about 7½ square miles as compared with the area of North Mankato, about 1.6 square miles.

We have a dike in North Mankato which runs in this fashion along the south part of the city for about a mile and then it follows the west bank of the river for about three-fourths of a mile, and then it turns to the west on the north side for about three-quarters of a mile. So, the total length of the dike is about 2½ miles.

Senator YOUNG. That is an authorized project?

Mr. MAGNUSON. I cannot answer the question because that construction has been in existence for at least 25 years.

Senator HOLLAND. That is local construction?

Mr. MAGNUSON. That is right.

Senator YOUNG. What are you asking for now, construction funds or investigation funds?

Mr. MAGNUSON. Investigation funds.

Senator HOLLAND. Is it an authorized project?

Senator HUMPHREY. Authorized for investigation.

Senator HOLLAND. Is it North Mankato that is 5,000 or Mankato, Mayor Wollam?

Mr. WOLLAM. North Mankato. Mankato is 19,000.

Mr. MAGNUSON. The area that is protected by the dike is shaded red and blue, and it covers roughly eight-tenths of a square mile and contains about 98 percent of the homes. These figures which are shown thus inside of a circle represent the depths of the water at the height of the flood.

FLOOD STAGE

Now the flood went over the banks along the south and had a depth of from 2 to 4 feet, and at this point it had a depth of 11 feet, 7 feet, 9 feet here, and 5 feet here. There were only two parts of the city within the city limits which were above the floodwater. There was a little area at the north end of the bridge between Mankato and North Mankato, which has an area of a little over 3 acres, and this shown in green over here, which is the side hill, and it goes from this dotted line, which shows the flooded area, up the slope to about an elevation of 150 to 200 feet. There are very few homes located in here, probably less than a dozen. As I said, 98 percent of the homes are located back of the dike in the flooded area.

Senator ELLENDER. How long has that area been flooded?

Mr. WOLLAM. You mean this last flood?

Senator ELLENDER. No. You build homes there?

Mr. WOLLAM. This is the first time since 1908. This the worst flood in history.

Senator ECTON. How much money are you requesting?

Mr. WOLLAM. Right now not any, or very little. We are asking for a survey of the river.

Senator THYE. The Engineers would have to give you what the cost of the survey would be?

Mr. WOLLAM. That is right.

This flood occurred on April 7. As I said, this is a primarily residential city. In 1940 we had a population of 3,517; in 1950 we had a population of 4,792. From the standpoint of percentages, we have grown larger than most cities within the State.

During the 10-year period from 1940 to 1950, over 300 new homes were built. Now these homes averaged from $12,000 to $18,000. We have a few homes that were flooded badly that were up in the $30,000 bracket.

EVACUATION OF CITY

Shortly after midnight on April 7 the order was given for the evacuation of the entire city. That was after midnight, April 7. By noon on Sunday of April 8 the evacuation was completed without the loss of a single life nor a single accident.

Now, when you evacuate 5,000 people and you have sick people and lame people, it became quite a job. We did not suggest at all that they move; we ordered, and we took our trucks and ambulances and everything we could get hold of and moved them out.

By Monday night, April 9, all public utilities were flooded. There were no lights, gas, water, nor sewerage system. It was the first time in my life that I saw an entire city die. There was not a single soul there but within this one square block.

Seventeen days after the flood a small group of citizens were able to move back to their homes. This continued from week to week, but over one-third of the population were not yet in their homes 2 months after the flood.

We have built a brochure showing pictures of the flood and the after effects. If you have an opportunity of seeing the brochure, you will see the types of homes we have, and where the water is nearly up to the ceiling of the first floor. And, as you look into the basements

of some of these homes where you mentioned about the foundations caving in, you have the dirt pretty near up to the floor joists, and when they start out cleaning they hardly know where to begin.

Senator THYE. Were not many of those homes the homes of returned veterans?

FLOOD LOSSES

Mr. WOLLAM. We have loans from a banking standpoint of over $300,000, primarily to veterans. In coming here, I can tell you that there is today only one loan that is in arrears on one payment. That is the type of people we have building themselves back.

Now our city engineer, Frank Magnuson, has made a detailed report of our public-utility loss, which is divided into 11 groups. The total loss of that was $193,000. Now, that was presented to the State Disaster and also to the Federal. They have accepted $159,000 to put back our public utilities, our roads, and our city water, and our sewerage system.

Now, we also have in here our taxable value of what we are collecting in taxes, which seems small when we are talking large sums of money, but our taxable value this past year on which they collect in the city of North Mankato is $179,840.

I am going to give you the loss. On June 11 we made a house-to-house survey on the loss sustained on personal property and real estate. By radio and newspaper, the people were advised a week ahead of the survey to get all their facts and figures together. We divided the town into sections and had 107 volunteers. Two questions were asked: "What is your personal-property loss? What is your real-estate loss?" In the official files in our building we have the addresses of every home contacted. We missed only one block, and that was the 600 block of one of the streets. We had a total of 1,289 homes in the flooded district. We have only slightly over 1,300 homes.

The personal-property loss totaled $470,356.10. The real-estate loss totaled $712,379.06. This gives us a grand total in the residential area of $1,182,735.16.

You may wonder where we get the odd cents. It is very interesting to note that at one of the places where we called for the facts and figures it was $439 and some odd cents. The man who made the survey put down $440. This lady said, "That is not right. The figure is actually $439 and some odd cents," and he had to put those figures down. At another place where the party was not home they had listed and itemized the things lost—so much on the furnace, so much on the upper floors—and down below was the last statement, "Loss of temper: no charge."

Now, during the flood, business was out all the way from 30 to 60 days and showed a loss in business of slightly over $400,000. The public-utility loss totaled slightly over $163,000, of which the State of Minnesota and the Federal Disaster is assuming $159,000.

Now, the business district's total personal-property loss was $103,940. The real-estate loss in the business district, right around this one square block that we had that did not get hurt so bad, was $73,149.99. The business loss of real estate and personal property and residential loss of personal property and real estate totaled

$1,459,824.16. That is our loss in the residential area of North Mankato of 5,000 people.

AID BY RED CROSS AND RFC DISASTER AGENCY

The Red Cross stepped in, and as of June 28—that is, when they left the city and had done everything they could do—had spent slightly over $110,000 on rehabilitation within the city. The RFC Disaster Agency approved loans for approximately $85,000, but this amount also includes loans made in the Mankato area.

Senator HOLLAND. How much were the loans of the RFC?

Mr. WOLLAM. The loans of the RFC at that time, June 28, were $85,000. Those have not come through yet. The money itself has not come through, but that $85,000 includes Mankato also. Now, the balance of this rests entirely on the shoulders of the citizens of North Mankato.

You mentioned something about income taxes, Senator, awhile ago, and that the flood losses are deductible from the income tax. If we were to take and figure this out, it would amount to a considerable amount of deductions.

COST OF FLOOD-CONTROL SURVEY IN MANKATO AREA

The first job, as we see it as laymen, is to make a survey 3 miles up the river and 3 miles down the river within the vicinity of North Mankato and Mankato. We well know that if we build our dikes on our side a little bit higher, we can throw the Minnesota River water into the commercial area of Mankato. That we well know and we know that is entirely wrong.

On or about May 29, Col. L. G. Yoder made an interim report to Washington as to the possible cost of this survey. The cost of the survey was approximately $20,000.

As I understand it, Senator, all the appropriations on that were turned down in the House of Representatives, but that cost would be approximately $20,000.

Now, after the survey is made, one can arrive at a cost of correcting this area so that a disaster of this kind need not happen again. Our people can again go forward with confidence and a feeling of security that goes with a true democracy.

Gentlemen, I thank you.

Senator HUMPHREY. Would you like to have your statement placed in the record?

Mr. WOLLAM. I would.

Chairman MCKELLAR. Without objection, that may be done.

(The statement referred to is as follows:)

STATEMENT OF H. C. WOLLAM

On April 7, 1951, we had a flood disaster in the city of North Mankato, Minn. By midnight of April 7 the entire city was under water with the exception of one square block. North Mankato has a population of 5,000 people. It is primarily a residential city. In 1940 we had a population of 3,517 and in 1950 we had a population of 4,792. During the 10-year period from 1940 to 1950, some over 300 new homes have been built within the city.

Shortly after midnight on April 7 the order was given for the evacuation of the entire city. By noon on Sunday, April 8, the evacuation was completed without the loss of a single life, nor a single accident.

By Monday night, April 9, all public utilities were flooded. There were no lights, gas, water, nor sewerage system. It was the first time in my life that I saw an entire city die.

Seventeen days after the flood a small group of citizens were able to move back to their homes. This continued from week to week, but over one-third of the population were not yet in their homes 2 months after the flood.

We have built a brochure showing pictures of the flood and the after effects. We have taken an inventory of our public-utility loss, real-estate loss, and personal-property loss.

Our city engineer, Frank Magnuson, made a detailed report of our public-utility loss which is divided into 11 groups and is given in report No. 1.

We had a personal survey on every home and business place within the city by 107 North Mankato citizens. We have a detailed report of this in our city offices and a brief outline in report No. 2.

We have a statement showing the taxable value of North Mankato in report No. 3.

The one question uppermost in the minds of our people is this: "What are you doing to correct the situation that need not have occurred?" That is our reason for appearing before you this afternoon. We have come to you for assistance. We need your help and we feel that if our problem is properly explained we can go home with the assurance that something will be done.

The first job as we see it is to make a survey 3 miles up the river and 3 miles down the river within the vicinity of North Mankato and Mankato. On or about May 29 Col. L. G. Yoder made an interim report to Washington as to the possible cost of this survey. The cost of the survey was approximately $20,000. After the survey is made one can arrive at a cost of correcting this area so that a disaster of this kind need not happen again. Our people can again go forward with confidence and a feeling of security that goes with a true democracy.

REPORT NO. 1

MAY 21, 1951.

Hon. MAYOR AND COMMON COUNCIL,
City of North Mankato, Minn.

GENTLEMEN: As requested, I herewith submit for your approval an approximate estimate of cost of flood damage to public property in the city of North Mankato, Minn., which flood occurred during the first part of April 1951.

Group No. 1 is a detailed cost estimate covering the damage to the surface of streets and alleys which totals	$44, 496. 66
Group No. 2 covers damage to the sanitary sewer system at a cost of	77, 250. 00
Group No. 3 covers damage to the storm sewer system which totals	11, 570. 00
Group No. 4 indicates damage to the water supply system which totals	850. 00
Group No. 5 shows the amount of damage to the municipal building and is	1, 600. 00
Group No. 6 covers damage to all water department buildings and totals	300. 00
Group No. 7 covers damage to the city park and playgrounds and is	2, 250. 00
Group No. 8 indicates accounts payable covering flood-prevention work performed on the Webster Avenue dike and is	5, 036. 67
Group No. 9 shows cost of pumping required for sewers, ponds, and basements totaling	8, 625. 00
Group No. 10 suggests an increase of 20 percent for all above costs to cover contingencies and unforeseen and is	30, 755. 67
Group No. 11 indicates additional engineering and inspection costs incurred because of the recent flood and represents about 5 percent of the total cost of reconstruction or about	9, 200. 00
The grand total cost equals	193, 734. 00

Estimated cost of flood damage to public improvements

Streets—Group No. 1:	
Item	
1.1—593 square yards, repair sidewalks at $3	$1, 779. 00
1.2—3,681 square yards, repair boulevard parking at 25 cents	920. 25
1.3—9,078 square yards, clean up boulevard parking at 2 cents	181. 56
1.4—21,431 square yards, bituminous surface patching at 75 cents	16, 073. 25
1.5—500 cubic yards, crushed rock in holes at $1.50	750. 00
1.6—175,000 square yards, seal coating at 8 cents	14, 000. 00
1.7—100 linear feet, replace curb and gutter at $2	200. 00
1.8—1,000 linear feet, reset curb and gutter at 50 cents	500. 00
1.9—5,000 cubic yards, fill in wash-outs at 75 cents	3, 750. 00
1.10—60 square yards, replace driveway approach at $4	240. 00
1.11—38,026 square yards, gravel surfacing at 10 cents	3, 802. 60
1.12—100,000 square yards, street cleaning at 2 cents	2, 000. 00
Total	44, 496. 66
Sanitary sewers—Group No. 2:	
Item	
2.1—7,000 linear feet, to relay at $9	63, 000. 00
2.2—10 manholes to rebuild at $200	2, 000. 00
2.3—50,000 linear feet, remove sand at 20 cents	10, 000. 00
2.4—5 linear feet, stations to repair at $250	1, 250. 00
2.5—500 linear feet, replace house connection at $2	1, 000. 00
Total	77, 250. 00
Storm sewers—Group No. 3:	
Item	
3.1—1,100 linear feet, to relay at $7	7, 700. 00
3.2—2 manholes to rebuild at $175	350. 00
3.3—17,600 linear feet, remove sand at 20 cents	3, 520. 00
Total	11, 570. 00
Water mains—Group No. 4:	
Item	
4.1—100 linear feet, to relay at $6	600. 00
4.2—50 gate manholes to clean at $5	250. 00
Total	850. 00
Municipal building—Group No. 5:	
Item	
5.1—Replace oak flooring	200. 00
5.2—Paint walls 2 coats	750. 00
5.3—Replace furniture lump sum	500. 00
5.4—Clean up lump sum	150. 00
Total	1, 600. 00
Water department building—Group No. 6:	
Item	
6.1—Clean up lump sum	300. 00
Total	300. 00
City park and playgrounds—Group No. 7:	
Item	
7.1—45,000 square yards, clean up at 2 cents	900. 00
Black dirt and seeding	1, 350. 00
Total	2, 250. 00

Estimated cost of flood damage to public improvements—Continued

Flood prevention on Webster Ave. Dike, accounts payable—Group No. 8:	
Item	
8.1—Mankato Ready Mixed Concrete Co	$51. 48
8.2—Lundin Construction Co	1, 258. 10
8.3—Ed Lundin, general contractor	535. 75
8.4—T. C. Hagge	52. 50
8.5—The Carney Co., Inc	647. 02
8.6—John R. Scheurer & Sons	542. 00
8.7—Hinker Sand & Gravel Co	169. 70
8.8—Lynch Sand & Gravel	55. 25
8.9—Guaranteed Gravel & Sand Co	426. 00
8.10—Ed Swartout	639. 37
8.11—Brown & Leguil	340. 00
8.12—Owen Papke	230. 75
8.13—Harley Witty	88. 75
Total	5, 036. 67
Pumping sewers, ponds, and basements—Group No. 9:	
Item	
9.1—3,500 hours labor at $1.15	4, 025. 00
9.2—Gasoline and oil for pumps	5, 400. 00
9.3—Repair and parts for pumps	1, 000. 00
Total	10, 425. 00
Contingencies and unforeseen—Group No. 10:	
Add 20 percent to total of above costs	30, 755. 67
Total	30, 755. 67
Special engineering services—Group No. 11:	
Item	
11.1—Special engineer 8 months at $625	5, 000. 00
11.2—Field surveys and inspection on flood reconstruction on above	4, 200. 00
Total (5 percent of above totals)	9, 200. 00
Grand total	193, 734. 00

Respectfully,

F. J. MAGNUSON, *City Engineer.*

REPORT NO. 2

JUNE 29, 1951.

To the COMMON COUNCIL,
North Mankato, Minn.

GENTLEMEN: On June 11, 1951, we made a house-to-house survey on the loss sustained on personal property and real estate. By radio and newspapers the people were advised a week ahead of the survey to get all their facts and figures together. We divided the town into sections and had 107 volunteers. There were two questions asked. What was your personal property loss and what was your real estate loss?

In our official file at the municipal building we have the addresses of every home contacted. We did miss one block and that was the 600 block on Park Avenue. There were 1,271 homes contacted and 18 homes in the 600 block on Park that were not contacted. This gives us a total of 1,289 homes in the flood area.

The personal property loss totaled $470,356.10. The real estate loss totaled $712,379.06. This gives us a grand total in the residential area of $1,182,735.16.

The business district's total personal property loss was $103,940 and the real estate loss totaled $73,149.99 giving us a total loss in the business district of $177,089. This added to the residential loss gives us a grand total of $1,459,824.16 on the combined residential and busin ss district.

During the flood where business was out all the way from 30 to 60 days shows a loss in business of slightly over $400,000. The public utility loss totaled slightly over $163,000 of which the State of Minnesota and Federal Disaster is assuming $159,000.

The Red Cross stepped in and as of June 28 had spent slightly over $110,000 on rehabilitation. The RFC Disaster Agency have approved loans for approximately $85,000 but this amount also includes loans made in the Mankato area. The balance rests entirely on the shoulders of the citizens in North Mankato.

Sincerely,

H. C. WOLLAM, *Mayor.*

REPORT NO. 3

COUNTY OF NICOLLET, OFFICE OF COUNTY AUDITOR, ST. PETER, MINN.

APRIL 27, 1951.

Following is a statement showing the taxable value of North Mankato for 1950—showing how much of the taxes to be collected this year will go to the State, county, city and school district. Also the amount of State aids received by district No. 60 during the past school year beginning July 1, 1950.

Total taxable value for 1950 is $951,603—real estate and personal $145,039 making a total of $1,096,642.

The tax levy for 1950 payable this year is $179,840.42 of which $24,148.97 is against personal property and $155,691.45 against real estate. Twelve and two-tenths percent or $2,946.17 of the $24,148.97 personal property tax is on household, etc. (assess in class No. 2).

Below is a statement showing how much of the 1950 taxes levied in the city of North Mankato payable in 1951 will go to the State, county, city of North Mankato and school district No. 60 and how much in each instance will come from tax on personal property and how much from real estate.

	From tax on real estate	From tax on class No. 2, household, etc.	From tax on all other personal property	Total
State taxes	$5,357.21	$150.76	$1,804.96	$6,592.93
County taxes, including high school tuition and school transportation	35,190.27	654.36	4,709.17	40,553.80
Total city taxes	50,244.64	934.28	6,723.78	57,902.70
School taxes, district 60	64,899.33	1,206.78	8,723.78	74,790.99
	155,691.45	2,946.18	21,202.79	179,840.42

The total tax levied for school district No. 60 includes principal and interest to become due on the 1950 school bond issue.

Senator HUMPHREY. Do you have a brochure for the committee?

Mr. WOLLAM. I have a brochure for you, Senator, and one for Senator Thye.

Senator HUMPHREY. We sill see that it gets to the committee.

Senator THYE. I will submit mine for the committee's records if they ever desire to refer to it.

Senator HUMPHREY. We have two other people here on another project that is within the purview of this committee. I have Mr. Strong and Mr. Erickson.

Senator THYE. Mr. Chairman, Mr. A. D. Strong has been working in behalf of Minneapolis, in behalf of all the users of the Mississippi River, whether it be in the State of Minnesota or down below the border line of Minnesota, as well as elsewhere in the Nation so far as developing river navigation, and it is a pleasure for me as a member of this committee, Mr. Chairman, to introduce him to you and the other members of the committee. Mr. A. D. Strong.

STATEMENT OF A. D. STRONG, SECRETARY, UPPER MISSISSIPPI WATERWAY ASSOCIATION, MINNEAPOLIS, MINN.

KEOKUK LOCK AND DAM, IOWA, UPPER MISSISSIPPI RIVER

MINNEAPOLIS UPPER HARBOR

Mr. STRONG. Senator Thye, Senator McKellar, and members of the committee, I will be very brief and I would like to submit this for the record.

Chairman MCKELLAR. Without objection that may be done.

(The statement referred to is as follows:)

STATEMENT OF ARTHUR D. STRONG, SECRETARY, UPPER MISSISSIPPI WATERWAY ASSOCIATION, MINNEAPOLIS, MINN.

My name is Arthur D. Strong. I am secretary of the Upper Mississippi Waterway Association, with principal offices at 1034 Midland Bank Building, Minneapolis, Minn. This association was organized nearly 25 years ago, and was chartered for the advancement of the commercial, agricultural, mercantile, and manufacturing interests of the upper Mississippi Valley through the development of an all-water transportation route via the Mississippi River to domestic and foreign markets. Its membership primarily embraces the States fronting on the upper Mississippi River—Missouri, Illinois, Iowa, Wisconsin, and Minnesota.

I wish to call to the attention of this committee the extreme urgency for an adequate appropriation to enable the Corps of Engineers to construct and place in operation a new lock (lock No. 19), 1,200 feet long by 110 feet wide, at Keokuk, Iowa. The present lock No. 19 (at Keokuk) has dimensions of only 358 feet long and 110 feet wide. It is understood that the latest estimated cost to the United States for construction and completion of the proposed new lock is $16,164,000, based on 1950 cost schedules.

Authorization for the construction of this new lock at Keokuk, Iowa, was included in the Rivers and Harbors Act of July 3, 1930, which authorized improvement of the upper Mississippi River through the creating of 26 locks and dams to provide a 9-foot channel from Minneapolis, Minn., to the Missouri River.

This present old, undersized and obsolete lock at Keokuk was built as a part of a privately owned hydroelectric project 37 years ago, nearly 18 years before Congress authorized the 9-foot channel.

It is urgent that this committee and the Congress be apprized of the precarious condition of this 37-year-old obsolescent lock at Keokuk. Should, by any chance, this lock fail during the coming navigation seasons, it would put an end to all river navigation north of Keokuk, Iowa. It is needless to describe the disaster that would result, for the upper Midwest is now dependent to a large degree upon river transportation for the supplying of petroleum products and coal.

We have been advised that the Director of the Budget requested that Congress appropriate funds for the construction of this long authorized new lock. The Upper Mississippi Waterway Association has repeatedly requested that funds be appropriated. However, unfortunately, all attempts have been futile and the reason seems to be that the building of this lock which was authorized 21 years ago comes under the classification of new work.

The Upper Mississippi Waterway Association has prepared a very complete brochure entitled "The 'Bottleneck' of the Upper Mississippi River." We urgently request that each member of this committee carefully read the important message in this brochure.

In the interest of the national defense emergency program and in consideration of the fact that continued water transportation is essential to the same, we urgently request that the Senate committee include in the 1952 budget an amount of $1,500,000 as recommended by the Director of the Budget for the beginning of this new authorized lock at Keokuk, Iowa.

NAVIGATION ON UPPER MISSISSIPPI RIVER

Senator THYE. Mr. Chairman, before Mr. Strong commences, I would like to say that the Mississippi at one place is no wider, but,

if you are careful you can pick your way across on the stones without getting your feet wet, because I have done it. You would not believe that of the mighty Mississippi River.

Senator HOLLAND. That is not during flood?

Senator THYE. No, sir. You would not think that the mighty Mississippi River down in your country could be so small in the northern part of the Nation.

Senator YOUNG. Might I ask first as to what project you are speaking?

EXTENSION OF CHANNEL TO NORTH MINNEAPOLIS

Mr. STRONG. The extension of the 9-foot channel to the north city limits of Minneapolis, which was authorized in 1937. There is a budget estimate, approved by the Corps of Engineers and approved by the Director of the Budget.

You cannot see this very clearly but it is a continuing project that consists of a lower dam and an upper dam. The Upper Mississippi Waterway Association is deeply concerned with the urgency of an appropriation by Congress for adequate funds.

In order to present this problem to the committee I want to offer the photograph which clearly shows the status of the past construction, existing construction, and future construction of the 9-foot channel to the north city limits. Because of the difficulty in creating this photograph, which so clearly explains this situation, I have only one enlargement which I wish to leave with the committee for its inspection. I would like to have the committee look at that.

Referring to the features which are noted in red, the present stage No. 1 coffer dam which is in existence is indicated by a solid red line. Here is another photograph, Senators, showing this cofferdam which is around this powerhouse. It is more clearly portrayed by a supplemental photograph. On this supplemental photograph please note the railroad bridge. The railroad bridge is being adjusted as part of the over-all plan.

Also please note on the same photograph the operation of St. Anthony Falls Co. powerhouse has been temporarily discontinued by the existing construction.

Stage 2 refers to the larger photograph that you have there. It shows the next cofferdam indicated by a dotted red line. This structure should be started immediately according to the present existing contracts.

AMOUNT FOR LOCK AND DAM PROJECT

Stage 3, referring to the large photograph, is the cofferdam that will be built on the west bank of the river where the lower lock will be constructed.

In other words, this is a continuing contract; this is the upper lock and this is the lower lock. We started to build this lower lock; the House discontinued funds, so this cannot be continued.

Chairman MCKELLAR. What was the amount that the budget allowed?

Mr. STRONG. The budget asked for $1,500,000 for the continuing contract.

Chairman MCKELLAR. And the House struck it out?

TOTAL ESTIMATED COST AND EXPENDITURES TO DATE

Mr. STRONG. The House struck it out. This entire work is under a single contract which has been let to a local contractor known as Johnson Peter Kewitt Co. The contract amounts to $6,500,000 of which the Government has already appropriated up to this time approximately $2,500,000.

Senator ECTON. Were they working on that this last year?

Mr. STRONG. Yes, and they are working on it today. If the Corps of Engineers do not have an adequate appropriation to continue paying the contractor and are forced to terminate the contract it is going to be a serious financial loss to the Federal Government.

To clarify this, I am told that should this contract be terminated short of completion, the Federal Government will be obligated to a cost of $1,500,000 to put the bridge back and make the powerhouse work again.

The House committee did not appropriate anything at all for the project in the fiscal year 1952. I refer to Congressman Judd and others and apparently the reason for the lack of appropriation seems to be that the committee of Congress was advised that there were sufficient unexpended funds in the hands of the Corps of Engineers for the fiscal year 1952 for work on the upper harbor. However, it is the sincere point of view of those who have studied this situation that this view is in error, for unless the Corps of Engineers have appropriated funds for a year in advance they are unable to lay plans for such important and continuing projects as the extension of the 9-foot channel. It has also been generally conceded in contemplating similar projects throughout the United States that when a project is started a sufficient balance of funds is placed on hand for future planning and such contingencies as may arise. In other words, it is very difficult for the Corps of Engineers or even a contractor employed to anticipate the time necessary for the work. For example, when conditions are ideal, work may proceed without delay and funds in the hands of the Corps of Engineers may be provided.

In the last 2 or 3 years the appropriation has been quite late in arriving for the disposal by the engineers. It is our sincere hope that the Senate committee will include in its appropriation for the fiscal year 1952 $1,500,000 which was recommended by the Director of the Budget and recommended by the Corps of Engineers. It seems to us in Minneapolis, who are close to this situation, that prudence and foresight dictate this course of action in order that excessive cost by delaying the continuance of construction may be avoided.

LOCAL CONTRIBUTIONS

Another important factor is commitments by Minneapolis totaling $2,500,000. This amount includes $1,100,000 in actual cash contributed to the Federal Government for Minneapolis' part of certain work cost, the remainder being allotted for expensive bridge changes and providing funds for certain condemnation of lands.

These bridge changes will be completed in advance of the Federal Government work. The city engineer later will show you a picture of how we raised two bridges. The city of Minneapolis is being put to considerable effort and expense to keep abreast of the original

construction schedule. In this regard the construction schedule is somewhat retarded due to the early flows in the river in the spring of 1951. The contractor for the Government will very likely get back on schedule.

As I have recently passed over the current construction, I have observed the contractor has now completed the cofferdam and is pouring concrete. It is therefore of extreme importance that the Senate Committee on Appropriations appropriate at this time $1,500,000 to provide the Corps of Engineers with the reserve fund to carry them into the fiscal year of 1953 and further to demonstrate to the city of Minneapolis that the project will be carried to completion. This act will show good faith.

As of this date Minneapolis has expended more funds than has the Federal Government. We all appreciate the seriousness of the present economic condition of the Government. We all appreciate the importance of economy. It is strongly felt by the proponents of this project as well as officials of Minneapolis that this important project, particularly this lower dam, must be continued. The city of Minneapolis has carried out its end of the agreement and borne its share of the burden in good faith. A relatively small amount of money is requested for the fiscal year 1952 in order to make certain that the work will not be stopped for any period for lack of funds. It will be false economy to withhold such a relatively small amount, particularly as it relates to the over-all omnibus appropriation, and thereby jeopardize the continuity of this project. Temporary delay would cost more than the immediate saving.

It is therefore requested that this committee of the Senate provide the amount of $1,500,000 for the fiscal year 1952.

NINE-FOOT CHANNEL PROJECT

The 9-foot channel, gentlemen, as you know, was authorized in 1930. When the proponents of the 9-foot channel went to the Federal Government they said to the Federal Government there will be a million tons of freight carried up to Minneapolis and St. Paul some day.

Senator STENNIS. In 1930?

Mr. STRONG. In 1930. They said there would be a million tons. Last year in Minneapolis and St. Paul alone the tonnage was 3,000,000 tons. We are now absolutely dependent in that area up there upon the use of water transportation for the supplying of our fuel. There has been expended by private capital in places like Clinton, Iowa, Dubuque, and many others, over $250,000,000 in improvements because of the 9-foot channel. The benefits have far exceeded the cost to the Federal Government, as you stated in your hydroelectric power.

As I have heard many talks on the seaway, it ill behooves any of us not to realize the benefits of low-cost water transportation to that great bread basket up in the upper Midwest. This 9-foot channel was authorized in 1937. We have started, the engineers have let a contract for $6,500,000.

The next stage is the upper lock. Maybe if we get into a war, maybe if we get into a serious situation, that can be held over until a more appropriate time. I hope not, but it is in the interest, as I said

before, of prudence and foresight. For heaven's sake let us not throw it away. It is going to cost $1,500,000 to stop the contract.

COST OF TERMINATING CONTRACT

General CHORPENING. We estimate that the total cost to the Federal Government of terminating this contract will be $1,500,000. That is the termination plus the restoration of the bridge and getting the power plant back into operation. The over-all cost without anything being added to the project will be $1,500,000.

Senator MCCLELLAN. Then what will it cost to get it restarted?

General CHORPENING. I do not know, sir. It would cost something because we would have to revise our plans and readvertise the work.

Senator MCCLELLAN. It would cost something to get back in.

Senator ELLENDER. What would happen if you spent the $1,500,000 requested?

General CHORPENING. The $1,500,000 we have asked for this year is to carry on the continuing contract that is now in force and under way.

Mr. STRONG. To build this lower dam and this lock.

Senator ELLENDER. If you do have it, what will happen at the end of the time when you expend this $1,500,000?

AMOUNT NEEDED TO COMPLETE PROJECT

Mr. STRONG. It is proposed we assume that the Congress will appropriate additional funds to go ahead and complete this unit of the project.

Senator HUMPHREY. At a total cost of $6,500,000.

General CHORPENING. $2,600,000 to complete the present contract.

Senator STENNIS. Do you have this open 12 months of the year?

Mr. STRONG. It is open about 3 weeks or a month longer than the Great Lakes, 9½ months.

Senator HOLLAND. This project would get the 9-foot through this city?

Mr. STRONG. It goes to the north city limits of Minneapolis. It will make available the finest harbor, as the engineers have said, in the world. This is a harbor that never floods because the water spills over St. Anthony Falls and drops 75 feet. At places like Mankato and St. Paul, etc., there is no place for the river to drop. The channel is there. There are 300 acres of land and 4 miles of river property and the largest warehouses at the northern end of the 9-foot channel.

NEW CHANNEL TO CONNECT WITH INDUSTRIAL SECTION

Senator THYE. Mr. Chairman, I can add to what Mr. Strong has said, that your largest warehouses and your industrial plants are above the falls or above this installation. At the present time you are only coming up to the foot or the bottom of the falls but your main part, your warehouses, and industrial part of the city are up above the falls farther northwest. In other words, the big warehouses that do all the northwest transfer are located above St. Anthony Falls. Your real river transportation will not be to the benefit of the northwest until such time as this entire project is completed and you can reach that

upper section of the Mississippi, because that is where your big warehouses are and that is where your transfer center is.

Senator HOLLAND. Will those two locks, the upper and lower, lift the traffic over St. Anthony Falls?

Senator THYE. Yes.

Senator HOLLAND. How far is it from the upper lock to this harbor?

Mr. STRONG. It starts right there almost.

Senator HOLLAND. It is in this area here and here?

Mr. STRONG. Yes, sir, it goes all the way up. That photograph does not continue on to the end.

Senator THYE. Coming up all the way from the Gulf of Mexico, your farm implements from Moline and East Moline and from St. Louis all come up the river and your warehouses for transferring this to the northwest, like the Dakotas and Montana, are up above St. Anthony Falls. As this freight comes up, you must handle it by dray to put it in the barges and put in the warehouses up above. So the entire project is most important to not only Minneapolis but to the North and South Dakotas and Montana as well as Colorado.

Senator HOLLAND. Is the 9-foot channel to continue upstream from Minneapolis?

Mr. STRONG. There is no study made of that as yet, Senator. I doubt whether there will be economic justification unless they start a movement of iron ore, because the Mesabi range is only 90 miles above there.

St. Paul has expended so far by private capital between $16,000,000 and $20,000,000 in tank farms, coal docks, fertilizing plants, and so forth. The topography of the land of Minneapolis below St. Anthony Falls, with the University of Minnesota on one side and the city on the other, is only 16 acres of land and it was duly authorized in 1937.

Senator HUMPHREY. Nevertheless that 16 acres has been a very busy section and the city of Minneapolis has spent a considerable sum.

Senator HOLLAND. The completion of this project will make useful your port, your warehousing facilities, and your terminal facilities that right now cannot be reached by river transportation?

Mr. STRONG. That is right.

LOCK AND DAM, KEOKUK, IOWA

Now I would like to have your permission, Mr. Chairman, to submit a statement which I will not read which relates to the Keokuk Dam which was not authorized.

Chairman MCKELLAR. Without objection that may be done.

(The statement referred to is as follows:)

COMPLETE INFORMATION RELATING TO THE PRESENT OUTMODED, UNDERSIZED LOCK 19, UPPER MISSISSIPPI RIVER, KEOKUK, IOWA

In the interest of the national defense emergency program, it is imperative that funds for the building of the authorized lock at Dam No. 19, Keokuk, Iowa, be included in the 1952 budget.

The 9-foot channel project required the construction of 26 locks and dams which form a series of lakes or pools in which the minimum channel depth is 9 feet. The project was authorized by Congress in 1930. In the original authorization for the 9-foot channel was included a standard-sized lock to be built at Dam No. 19, Keokuk, Iowa. Because the authorization for the 9-foot channel in 1930 included

the construction of this new lock at Keokuk, it is our opinion that this project should not be classified as new work or a new project. This new lock is to be at the site of the present dry dock. The existing lock is to be used as an auxiliary. (See photograph, next page.)

It is urgent that the Congress be apprized of the precarious condition of this 37-year-old obsolescent lock at Keokuk. Should, by any chance, this lock fail during the coming navigation season, it would put an end to all river navigation north of Keokuk, Iowa. It is needless to describe the disaster that would result, for the upper Midwest is now so dependent upon river transportation for the supplying of petroleum products and coal.

Quoting from the summary of introductions and recommendations contained in the report of the President's Water Resources Policy Commission, "The Nation should continue the improvement of its inland and intracoastal waterways to standard depth as an important objective of comprehensive basin programs."

Both the Corps of Engineers and proponents of low-cost water transportation have repeatedly appealed to Congress for an appropriation for the construction of this authorized new lock. Unfortunately all attempts have been futile, and the reason seems to be that the building of this lock which was authorized 20 years ago comes under the classification of new work.

The Upper Mississippi Waterway Association suggests that you read carefully the attached information entitled "The 'Bottleneck' of the Upper Mississippi River." We then request that you contact the Senators and Representatives from your State urging their support for appropriation of funds by Congress for the building of this new lock at Keokuk which was properly authorized in 1950.

THE "BOTTLENECK" OF THE UPPER MISSISSIPPI RIVER

Nine-foot depth for navigation on the Mississippi River between the Missouri River and Minneapolis, a distance of 660 miles, has been available since 1939, but a serious bottleneck still exists at lock No. 19, Keokuk, Iowa, about 180 miles above St. Louis, Mo. The existing lock there, built in 1913, is entirely inadequate for the needs of present-day traffic. It is 358 feet long by 110 feet wide as compared with dimensions of 600 feet by 100 feet for locks at other sites on the upper Mississippi River and 1,200 feet by 110 feet for the new lock being built at the Chain of Rocks near St. Louis. These latter dimensions are planned for the proposed new lock at Keokuk, for which Congress has not as yet appropriated any funds.

Like the chain that is no stronger than its weakest link, no waterway is more efficient than its smallest lock, which is the case on the upper Mississippi River at lock No. 19, Keokuk.

The present Keokuk lock lies athwart one of the principal inland waterway transportation arteries of the United States, whose traffic is constantly growing. According to official records of the Corps of Engineers, the tonnage transported on the upper Mississippi River between Minneapolis and the mouth of the Illinois River has risen to more than 3,000,000 tons annually, an increase of over 300 percent as compared with the 776,000 tons that were transported in 1933. This significant growth of traffic has resulted, in a large measure, from the improvement of the upper Mississippi River by a modern lock-and-dam system and the maintenance of a 9-foot channel and emphasizes the need for enlarging and modernizing the present Keokuk lock to properly fit in with the improvements already effected.

All of the important cities and communities on the upper Mississippi River between Minneapolis and the mouth of the Illinois River, which account for the heaviest volume of traffic are located north of Keokuk including Rock Island and Moline, Ill.; Burlington, Muscatine, Davenport, Clinton, and Dubuque, Iowa; Prairie du Chien and La Crosse, Wis.; and Winona, Stillwater and Minneapolis and St. Paul, Minn. Consequently, the major part of the traffic of this waterway must transit the inadequate and obsolete Keokuk lock. The statistics of the Corps of Engineers indicate that the traffic through this lock in 1948, 1949, and 1950, amounted to 3,125,000 tons, 3,514,000 tons, and 3,031,000 tons, respectively, or about 95 percent of the total traffic of the upper Mississippi River between Minneapolis and the mouth of the Illinois River.

Since the Keokuk lock is a restrictive funnel for the preponderant portion of the traffic for a very essential artery of inland waterway traffic, it is important to examine the conditions there at the present time. After some 35 years of service, the old lock shows the effects of age and wear, and many of its mechanical features are nearing or have already reached the end of their economic life and usefulness.

Major overhaul of the structure is urgently needed and should be undertaken at once if a new lock is not constructed in the immediate future. Without such action, the old lock will cause prolonged delays and interruptions to upper Mississippi River traffic to a much greater extent than at present. Even with complete overhaul, which could not be accomplished without intolerable interference with traffic for several years, the structure would remain an outmoded lock of short and restrictive length and slow-operating characteristics in a system of larger and faster operating locks.

Because of its small size, Keokuk lock must be operated more than twice as often as a standard-sized lock. Wear and tear are correspondingly greater and further aggravated by yearly deterioration from age. For the past several years, costs of maintenance and repair of the old lock have greatly exceeded corresponding average costs of the locks at other locations on the Upper Mississippi River. Such excess in costs is increasing year by year and may be expected to continue to rise until the old lock is completely overhauled or the new lock is constructed. During fiscal year 1948, the cost of maintenance and repairs for Lock No. 19 was $46,000 as compared with an average of approximately $20,000 for the other 11 lock and dam sites in the Rock Island engineer district. Repair, maintenance and improvement costs for the Keokuk lock for the fiscal years 1949 and 1950 were $94,993 and $38,796, respectively.

The filling and emptying valves of the Keokuk lock are of the old air-operated cylinder type in contrast with the modern electrically operated tainter-type valves at other locks. There are four inlet and four outlet valves at the Keokuk lock, all of which have broken down several times and require frequent repairs. It is assumed that normally such parts as valves will have a useful life of 25 years. The outlet valves were overhauled in 1939–40 at a cost of $18,500 and again in 1948 at a cost of $16,000. Repairs in the fiscal year 1949 amounted to $15,800. With increasing traffic and use, the necessity for a similar overhaul, in addition to emergency repairs, may be expected by 1953. The inlet valves were overhauled in 1941–42 with an expenditure of $8,100, and another overhaul will be required by 1952.

The upper lock gates require frequent repairs to buoyancy chambers, guide slots, and operating mechanism, and an occasional complete overhaul and repainting. A general repair job on these gates was completed a year ago at a cost of $25,000. Gate repairs for the fiscal year 1949 totaled $45,560. Further major repairs are anticipated after about an additional 5 years' service. The lower miter gates were reconditioned in 1932–34 for $30,000 and will require another reconditioning in the next few years.

The upper sheer boom at the Keokuk lock is a floating timber structure presently augmented by a steel barge. The lower sheer structure consists of floating timber booms held in position by rock-filled timber cribs. The structures, originally provided for traffic before the 9-foot channel was constructed, are entirely inadequate for present traffic. Principally because of the lack of guide walls and the inadequacy of sheer booms, Keokuk lock has been the location of one-third of all accidents between tows and locks in the Rock Island engineer district. These sheer booms recently required a general overhaul during the navigation season costing $11,700. Because of the inadequacies of these structures, continual repairs will be required, and further general overhauling may become necessary at almost any time.

Extensive replacement of the disintegrated portions of the exposed masonry will be imperative within the next few years to protect the interior mass of the structure, particularly at critical points such as gate and valve sills and seals, from deterioration that would result in prohibitive repair costs and complete suspension of traffic. Extensive delays due to repairs or resulting from failure of the structure have been avoided in the past only through the services of an experienced diver and by use of elaborate methods devised for making repairs while the traffic is under way. There is no possibility that such good fortune will continue indefinitely.

In view of the obsolescence and excessive operating and maintenance costs of the Keokuk lock as compared with the newer and more modern locks, it is readily apparent that it is clearly a waste of public money to be spending funds for the upkeep of such an outmoded structure. No emphasis is needed to indicate that a new structure would effect a considerable saving in Government expenditures with greatly increased operating efficiency.

Another very important aspect that merits discussion is the question of delays at the outmoded Keokuk to the operators of commercial towboats and barges and to the substantial volume of traffic using that facility. The following tabulation

based on data furnished by the Rock Island district office of the Corps of Engineers indicates the extent of the delays which occurred during 1948, 1949, and 1950, in connection with the transiting of commercial tows through the Keokuk lock:

	1948 [1]	1949 [2]	1950 [3]
Total tonnage [4]	1,573,410	3,514,072	3,030,920
Average tons per tow	3,140	3,085	3,349
Total number of tows	501	1,139	905
Total number of lockages	1,007	2,195	1,810
Time spent in lockages (hours)	1,004	1,872	1,582
Time of delays to tows (hours)	537	1,000	1,000
Average lockage time per tow (hours)	2.00	1.64	1.75
Average delay per tow (hours)	1.07	.88	1.10
Average time to transit lock 19 (hours)	3.07	2.52	2.85
Average per lockage (hours)	1.00	.85	.87

[1] 1948 figures are for June, July, October, and November only, as those were the only months when delay records were maintained. Total tonnage for 1948 season was 3,125,156 tons.
[2] Nine months.
[3] 1950 records for March through September only are included.
[4] Tonnage figures are preliminary but are considered to be in substantial agreement with the final official figures.

It is understood that the apparently excessive average lockage time for the 1948 season was due to work being carried out on the discharge valves during that navigation season. The emptying time of the lock is increased about 25 percent when one of the valves is out of operation, as was the case for a considerable part of the 1948 season.

If the proposed new Keokuk lock had been in operation, it is estimated that, on the basis of the 1949 season figures, the 1,139 commercial tows could have been passed in 1,139 lockages, and delays would have been practically eliminated. This would have meant 1,056 less lockages than the 2,195 that were required. Based on the filling and emptying time for the new lock, including gate operation time, of about 10 minutes, and allowing 5 minutes each for entering and leaving the lock, which will have much better approaches than the existing lock, the lockage time should approximate 20 minutes if upstream and downstream tows alternate, and 30 minutes when all are in the same direction. For use in estimating time savings, 25 minutes is considered a fair average lockage time. Lockage of 1,139 tows through the proposed new Keokuk lock would require 475 hours, a saving of 1,397 hours as versus 1,872 hours required in the 1949 season. These 1,397 hours combined with the 1,000 hours of delay time which would be eliminated, aggregate an estimated possible saving of 2,397 towboat-hours. Similar figures for the 7 months of the 1950 season extended to a full season indicate possible savings of 1,549 hours in lockage time, plus 1,283 hours of delays which would not occur at the new lock, or a total possible saving of 2,832 hours.

The value of savings in time, estimated, perhaps, too conservatively, on the basis of fixed charges of $37.50 per hour for an average tow in 1948, is obviously considerably more by now, considering the steady increase in horsepower of new towboats and the increased construction, maintenance, and operating costs. Detailed figures with which to revise the annual charge data for boat and barge fleets are lacking, but on the basis of a few reliable figures on lay time charges and construction costs of tows now operating in the petroleum trade, it is considered that $60 per hour is not unreasonable. Using $37.50 per hour for delays in 1948 and $60 per hour for delays in 1949 and 1950, the annual value of delays and cost per ton of traffic moved through the Keokuk lock were as follows:

	[a] 1948	[b] 1949	[c] 1950
Tons	[d] 3,125,156	3,514,072	3,680,398
Possible savings (hours)	2,760	2,397	2,832
Savings value (dollars)	103,500	143,820	169,920
Value per ton (cents)	3.3	4.1	4.6

[a] Four months' figures extended to 9 months.
[b] Nine months.
[c] Seven months' figures extended to 9 months.
[d] Actual tonnage for 9 months.

It is very apparent that with each year's increasing traffic the obsolete facility at Keokuk is causing the towboat and barge operators increasing losses with respect to the transportation of freight which deprive these operators of an appreciable amount of revenue needed to improve their operating efficiency.

The average delays per tow at the Keokuk lock during the years 1948, 1949, and 1950, based on the data supplied by the Rock Island district engineer office, as previously shown herein, are 1.07, 0.88, and 1.10 hours, respectively. While averages have their value statistically, they do not depict the situation with the realism that emanates from the examination of individual instances. For example, on page 21 of The Waterways Journal of October 14, 1950, there appeared the following statement concerning delays to commercial tows at Keokuk lock:

"KEOKUK, IOWA, October 10—The big push is on again as the season approaches closer to the end and the Keokuk lock crews have had few spare moments with which they could complete routine maintenance work. Total lockages for September were 347 carrying a total of 487,285 tons through the lock. Among the last busy days of September were two in succession, the 28th and 29th. On this 48-hour period there were 16 tows handled. As usual when boats pile up like this all but the first one was delayed. Typical delays during the period were as follows:

Vessel	*Hours' delay*
Sam Clemens	10
Sturgeon Bay Queen	9
Alexander Mackenzie	8
Albert E. Heekin	6
Davy Crockett	6

"These were the longest during the period and there were several more varying from 3 to 5 hours.

"Again on October 3 traffic was heavy with delays of 7½ hours for the *Floyd H. Blaske*, 5 hours for the *Baton Rouge*, and 4 hours each for the *Nelson M. Broadfoot, Roland, and Husky*. Lockmen state that 4- and 5-hour delays are short and that delays of 6, 7, and 8 hours are very commonplace."

The present trend on inland waterways toward larger and more modern floating equipment is another cogent reason for a lock of increased dimensions at Keokuk. Some of the large tows transporting petroleum products to the Twin Cities carry as much as 4,000,000 gallons and are between 800 and 900 feet long, including the towboat. It is obvious that a tow of this length could transit the small 358-foot Keokuk lock only by being put through it in three sections, thus necessitating considerable delay and increased vessel operating costs.

No emphasis is needed to indicate that larger floating equipment is very necessary because it permits the transportation of a greater volume of traffic per unit and per towboat trip, thereby effecting lower operating costs and charges. This holds true for the upper Mississippi River. As the size and draft of barges and towboats are increased with the improvement of inland waterways, the net cargo carried increases at a more rapid rate than capital and operating expenses; hence these charges are distributed over a greater payload, thus decreasing the transportation cost per unit of load. Shippers and receivers benefit from the resulting more economical freight charges, which is not the case where outmoded and bottleneck facilities exist.

The economic aspects of the region served by the upper Mississippi River and their relation to the Keokuk bottleneck merit consideration. Along or adjacent to the upper Mississippi River are the States of Illinois, Wisconsin, Minnesota, Iowa, and Missouri, whose combined area is 322,666 square miles or approximately 11 percent of that of the United States total. According to the April 1, 1950, preliminary count of the 1950 Census of Population, Illinois has a population of 8,684,513, an increase of 10 percent over 1940; Wisconsin, a population of 3,421,316, or 9 percent more than in 1940; Minnesota a population of 2,968,135, 6.3 percent in excess of 1940; Iowa, a population of 2,612,598, an increase of 2.9 percent over 1940; and Missouri, a population of 3,933,636, or 3.9 percent above that of 1940.

There are 33 counties along the upper Mississippi River from Keokuk, Iowa, to Minneapolis, Minn. Their total population in 1940 was 1,887,149, which in 1950 had increased 11.8 percent to 2,112,224. The 1950 census indicates that there are 39 cities and towns of over 1,000 population on the upper Mississippi River north of Keokuk to and including Minneapolis, Minn., with an aggregate 1950 population of 1,298,604, or 8.4 percent more than the 1,197,756 in 1940.

Only 3 of the 39 localities had decreases as compared with 1940. Some of the representative increases for individual localities follow:

Locality	*Percent increase*
Fort Madison, Iowa	6.3
Burlington, Iowa	18.6
Rock Island, Ill	13.6
Davenport, Iowa	11.5
Moline, Ill	7.8
East Moline, Ill	12.4
Clinton, Iowa	14.8
Dubuque, Iowa	12.8
La Crosse, Wis	11.0
Winona, Minn	11.0
Red Wing, Minn	6.7
South St. Paul, Minn	35.1
St. Paul, Minn	7.6
Minneapolis, Minn	5.1

Here, then, exists the anomaly of a very important region with 11 percent of the area of the United States and with a steadily increasing population, having the efficiency of one of its principal transportation arteries, the upper Mississippi River, throttled by the obsolete, outmoded and inadequate facilities that are presently in use at the Keokuk lock. This increasing population generates additional traffic in the transportation of which the upper Mississippi River should be utilized to the fullest extent but which cannot be accomplished without a modern lock at Keokuk.

The many types of businesses dependent upon inland waterway transportation on the upper Mississippi River is evident from the variety of commodities carried thereon consisting of such items as alcohol, canned food products, cement, chemicals, coal, coffee, grain, grain products, iron and steel, iron or steel scrap, paper, petroleum and petroleum products, phosphate rock, sand and gravel, sisal, soybeans and products, stone, sugar, and sulfur. Many of these commodities originate at or are destined to points away from the waterway and receive a prior or subsequent haul by rail or truck in addition to the water transportation so that many interior communities in the States along the upper Mississippi River, as well as the river ports, receive the advantage of the economy of the freight charges via the water route.

Petroleum and petroleum products account for about 60 percent and coal 20 percent, or a total of 80 percent of the upper Mississippi River traffic. These commodities, together with sulfur, grain, cement, phosphate rock, and iron and steel articles, are heavy loading bulk commodities, which are shipped in substantial volume for long distances and require large tows of barges for their economical, efficient, and continuous movement.

The Twin Cities area of St. Paul and Minneapolis, Minn., with a population of more than 1,000,000 is one of the principal areas of the Nation for the consumption of petroleum and petroleum products and coal, the annual receipts via the upper Mississippi River approximating 1,000,000 and 500,000 net tons, respectively. This petroleum tonnage is the equivalent of 7,000,000 barrels. Substantial quantities of these commodities also move via the upper Mississippi River to other points north of Keokuk. For example, according to the St. Paul District Engineer office, receipts of burner oil at points on the river north of Guttenberg, Iowa, set an all-time record in 1950 of 540,132 tons, coal receipts for the same section aggregating 1,009,883 tons. The large volume of these commodities transported on the upper Mississippi River are vitally necessary for the welfare of the many cities and communities along that waterway in providing thousands of homes and industrial establishments with heat, light, and power, and in the maintenance and operation of public utilities producing electricity, gas, and other essential services which use tremendous quantities of these fuels.

It is necessary that large quantities of petroleum and petroleum products and coal, in addition to the regular consumption, must be moved on the upper Mississippi River throughout the open navigation season for storage and availability during the winter months when navigation is closed. This requires the most efficient barge transportation that can be operated. North of Keokuk, Iowa, on the upper Mississippi River there are some 30 large oil terminals with an aggregate storage capacity of between five and six million barrels. Important traffic of this character cannot be transported efficiently and adequately when

its movement is retarded by such a small and out-of-date lock as exists at Keokuk lock.

One of the principal underlying factors in the phenomenal expansion of petroleum distribution facilities on the upper Mississippi River has been the availability of low-cost water transportation. That other industrial development is being attracted by economical water transportation is evidenced by the fact that some eight chemical plants have been erected in cities from Dubuque, Iowa, to St. Paul, Minn. They are important users of phosphate ingredients which are received from the Gulf ports by low-cost barge transportation and are utilized to rehabilitate soil depleted by the strain of producing large quantities of food for the United States and other countries of the world.

Even today new industries producing, marketing, or distributing such products as steel, aluminum, sold fuel, sulfur, and grain products are considering the use of the inland waterway transportation on the upper Mississippi River because it has been discovered that they can extend their market areas and reach a tremendous consuming section of the Northwest through the economy of such transportation. These various industrial developments will mean augmented tonnages of dry cargo, coal, chemicals, grain, steel products, and many other commodities for transportation on the upper Mississippi River. Water transportation should not be permitted to become unattractive to new industries seeking locations along the upper Mississippi River on account of bottleneck facilities that hinder efficient transportation operations and deprive shippers and others of the benefits accruing therefrom.

With the present national defense emergency, which is facing the country and appears to be of some duration, it is inevitable that the fullest use of all existing transportation facilities will be required, including the upper Mississippi River. Consequently the obsolete structure at the Keokuk lock should be eliminated as quickly as it is possible to do so. It must not be forgotten that during World War II inland waterway transportation was of tremendous significance to the Nation in the movement of strategic commodities; the floating of thousands of sea-going vessels to the sea from inland shipyards; the making possible of widespread geographical diffusion of essential manufacturing industries that otherwise would have been forced into vulnerable and congested coastal areas; and the easing of the burden placed upon other forms of transportation by increased traffic related to wartime activities.

The service rendered by inland waterway transportation during World War II demonstrated conclusively that it is a vital instrument of national defense; that it is a permanent integral part of our national transportation structure; and that there is an inescapable national need for all forms of transportation. This applies with equal force to the upper Mississippi River north of Keokuk and emphasizes further the need for a modern Keokuk lock.

Summing up the situation it is apparent that the obsolete and outmoded Keokuk lock should be replaced with new and modern appurtenances, as soon as possible, for the following reasons:

1. It impairs the usefulness, and prevents the fullest utilization, of the upper Mississippi River as an artery of commerce.

2. It interferes with the efficient movement of an important and increasing traffic.

3. It causes unnecessary delays to towboat operations and consequent congestion of traffic on a main artery of commerce.

4. The interference with the efficiency and successful operation of inland waterway transportation results in increased operating costs for inland waterway carriers and operators on account of the inherent delays to operations and the navigation difficulties encountered.

5. The small size of the present lock prevents the barge and towboat operators from fully utilizing the most modern and most efficient floating equipment thus hindering the progress of inland waterway transportation.

6. The delays and navigation difficulties brought about by the present Keokuk lock result in dissatisfaction with inland waterway transportation on the part of shippers and receivers and prevents them from receiving the full benefits from this medium of transportation to which they are entitled.

7. The bottleneck Keokuk lock, by preventing the fullest development of inland waterway transportation on the most efficient basis, retards the location of industry in the region served by the upper Mississippi River.

8. If a major failure of the Keokuk lock occurred, which is not at all impossible in its present worn-out condition, it might well mean that there would be no

water freight services on the upper Mississippi River for many months depending upon the time required to effect the necessary repairs and replacements. This would seriously disrupt commerce and industry and cause severe financial losses to barge and towing vessel operators while real losses, financial and otherwise, would be suffered by the general public, shippers, and others who must depend upon water transportation services.

9. The present Keokuk lock has already reached the end of its usefulness and hence compels the Federal Government to incur wasteful expenditures of public funds for the repair and maintenance of an obsolete and inefficient facility.

10. The recurring national defense emergencies which face the Nation today require the fullest use of its transportation facilities which must be in the most efficient condition to properly handle the augmented emergency traffic. This applies to the upper Mississippi River and hence a new lock is needed at Keokuk in the interest of national defense.

Construction of the new lock at Keokuk by the Corps of Engineers will be highly beneficial to the proper development of inland-waterway transportation, to the users of such transportation, to the economy and industrial enhancement of the upper Mississippi Valley, and to the national defense. Consequently, it is obvious that it is economically justified and should be undertaken at the earliest possible moment.

Please contact your Senators and Representatives.

Senator THYE. Before Mr. Strong introduces Mr. Erickson, I would like to have a statement from the general as to whether there are sufficient funds to continue the work on this installation the coming year, because the House was of the opinion that there were sufficient funds to continue the project for the next fiscal year.

As we understood it, that was one of the reasons why the House took no action on this budget request.

I would like to get into the record the fact as to whether there are funds to continue the contract or whether the contract would have to be terminated.

General CHORPENING. There are not sufficient funds under the rate of progress being maintained to carry us through the year.

Senator THYE. Therefore, if we do not make an appropriation, everything must come to a stop and the restoration of the railroad bridge will have to be made as well as the power plant?

General CHORPENING. That is correct, sir.

AMOUNT REQUESTED FOR KEOKUK DAM AND LOCK

Senator HOLLAND. How much is required to carry through this year, General Chorpening?

General CHORPENING. We are asking for $1,500,000.

Senator ELLENDER. General, as I understood you a while ago, the entire project would cost about $6,000,000 to complete.

General CHORPENING. That is the lower lock; yes sir.

Senator ELLENDER. If it is not completed and it is stopped, it means $2,000,000 more additional, according to the study made in this record, because it says here that it is estimated the whole project will cost about $2,000,000 additional to complete.

General CHORPENING. We estimated that $1,500,000 will be required this year, sir.

Senator ELLENDER. This says $2,000,000.

Senator HUMPHREY. Mr. Erickson would like to say a word.

Senator CORDON. Before he starts, may I ask one question, General?

When you presented your estimate to the Bureau of the Budget to continue work on this lower lock, did you take into consideration your unexpended balance?

General CHORPENING. Yes, sir.

Senator CORDON. So that the full $1,500,000 you have requested is necessary to supplement the unexpended balance to continue your continuing contract for the ensuing fiscal year?

General CHORPENING. Yes, sir.

Chairman MCKELLAR. All right, sir.

STATEMENT OF HUGO ERICKSON, CITY ENGINEER, MINNEAPOLIS, MINN.

KEOKUK LOCK AND DAM, IOWA

Senator HUMPHREY. May I say, Mr. Chairman, it was my privilege to work with Mr. Erickson while I was mayor of Minneapolis. He is our city engineer out there. I think there is no finer one in the country and no one who knows the upper harbor better than Mr. Erickson, unless it be Mr. Strong, who has spent a lifetime at it.

Mr. ERICKSON. I appreciate the courtesy of the committee in hearing me.

I just very briefly want to point out the features directly affecting the city of Minneapolis from a financial standpoint—let us say from an engineering standpoint.

When Congress approved this project it stipulated that the city of Minneapolis should pay $1,100,000 into the Government fund for this. Also, it required that the city should change its facilities, such as bridges, sewer and water lines. The city from current tax resources has appropriated $300,000 each year for the continuation of this project. Up to the present time the city has spent $2,700,000. In 1954 it will have spent over $5,000,000 for its part of the project which includes, as I say, the raising of bridges to meet the minimum requirement of 26 feet vertical clearance under all bridges.

Briefly I would like to point out that the city of Minneapolis has shown good faith in its contracts, has paid its obligations, and has gone along with its work as stipulated by the Congress, and we hope that Congress will do the same.

Senator HUMPHREY. Do you have a prepared statement, Mr. Erickson?

Mr. ERICKSON. No.

Chairman MCKELLAR. If there is nothing further, we are very much obliged to you.

Mr. ERICKSON. Thank you, Mr. Chairman.

ORWELL DAM UNIT, RED RIVER VALLEY PROJECT

Senator YOUNG. May I ask a question of General Chorpening with respect to one of the projects in the Red River Valley? The project I have reference to is in Minnesota.

The Orwell Dam will aid substantially in controlling the floodwaters on the Red River?

General CHORPENING. I am not directly familiar with that. Perhaps some of my associates are.

Senator YOUNG. The reason I asked, Mr. Chairman, is that there is a budget estimate for this project in the amount of $700,000 and

no one has appeared in behalf of it, so far as I know. I wanted to know if it was important to flood control on the Red River.

General CHORPENING. It is a small dam, Senator, and I think it has been partially completed. We can look up that information. I did not know that this was going to arise. I can look it up and give a little statement for the record in a few minutes. (See p. 1511.)

Senator STENNIS. It shows only $931,000 has been spent.

MIDWESTERN FLOOD CONTROL PROJECTS

STATEMENT OF HON. JAMES P. KEM, A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

MISSOURI RIVER BASIN

Senator KEM. Mr. Chairman and members of the committee, I would like to make a brief statement about the recent flood conditions in the Missouri Valley.

I believe we ought to really think of this flood in terms of homes and people because it is a great disaster that has affected the lives and the homes of the people. It has affected their ability to earn a living and it has ruined and damaged the most cherished of all property, the home.

I believe, Mr. Chairman, that it is in the public interest that these people who live and work in the valley of these rivers, should continue to do so. They should continue to live and work there, not only for their own good, but for the benefit of their fellow citizens.

These streams are interstate streams. They run through several States. The rainfall comes in one State and the effects are felt in others. I think that every Senator who has examined the situation has a common purpose and determination, and that is to do whatever is necessary to protect this part of the United States from a similar or recurrent catastrophe.

The words that you hear on the lips of everybody are that "It must not happen again."

Now, of course, this is an engineering work of the first magnitude. I am no expert on the subject. I will not undertake to tell the committee—the committee knows more about it than I do. I will not undertake to tell how it should be done in detail, and what should be done to accomplish this purpose that we all have in mind. Mr. F. G. Gurley, president of the Atchison, Topeka & Santa Fe Railway Co. said the other day:

> In my opinion, while there may be general agreement at this time about a broad program with a problem of such magnitude, any engineer may reasonably shift his views a bit after a start has been made. Without swerving at all from our purpose, we should not make the mistake of trying to be too specific too early. After all, it is our purpose which is important. Our purpose should be the prevention of another disaster. No one should use this great tragedy as the fulcrum to exert pressure for unrelated plans for social, economic, and political change.

I concur fully in Mr. Gurley's statement.

I think, Mr. Chairman, it also should be said that no one should seek any party or political advantage from this great tragedy. I cannot think that anyone who tries to get political advantage out of human misery will gain anything in the end.

DAMS ON TRIBUTARIES OF THE KANSAS RIVER

In the first place, I would like to speak very briefly about the dams on the tributaries of the Kansas River.

The Army engineers are of the opinion that the damage which recently occurred in Kansas City, Mo. and adjacent cities may be avoided in the future by completion of three proposed projects on the tributaries of the Kansas River. These are as follows:

THE TUTTLE CREEK PROJECT

This is on the Big Blue River in Kansas. This project was authorized in 1944. The plans have been completed and the engineers are ready to go when the necessary funds are made available.

Chairman McKellar. Was that not stopped because of local trouble? I asked the Chief of Engineers, General Pick, why he had stopped it. He said he had not done it. He said it was a fight between local interests out there, those who wanted to build small dams and those who wanted to build these three dams. If those three dams had been built, there would not have been any trouble at Kansas City at this time and Kansas City would have been saved.

Now I might say to the Senator that I have heard—and I do not remember whether it was over the telephone or how—that since this has occurred there has been a request by the Corps of Engineers to have a budget estimate for these three dams, the first one, at any rate.

Senator Kem. Mr. Chairman, I am not familiar with the local situation in the State of Kansas.

Chairman McKellar. There is an estimate for Tuttle Creek.

Senator Kem. I was just going to get to that, sir. I have been advised by Mr. Bassett, of the Public Works Committee that a supplementary estimate has been submitted by the Corps of Engineers in the amount of $5,000,000 for this project. Regardless of what has been done in the past, I would like to ask the committee for favorable consideration of that estimate.

MILFORD PROJECT

Now, the Milford project is a project on the Republican River. It is not yet authorized. The problem there, as I understand it, is to find the money to permit the planning of work on this project.

Chairman McKellar. That is one of the three?

Senator Kem. That is one of the three.

Senator Cordon. You say it has not been authorized?

Senator Kem. It has not been authorized.

Chairman McKellar. I do not see how we can go into it at this time, unless it is authorized.

Senator Kem. I thought perhaps there were some blanket funds that might be used.

Chairman McKellar. There would have to be some planning, in order to do that.

Senator Kem. That is all you can do now, sir. Perhaps you can find the money to do the planning. I do not have in mind you can appropriate for the construction.

Chairman McKellar. The same is true of the other project on the other side.

Senator Kem. The Perry project is in the same position, sir.

Senator Cordon. May I interrupt you to ask the general what funds are necessary for preliminary examination and planning on that project which has not yet been authorized?

General Chorpening. We included in the letter and papers which I submitted to the chairman of the committee some information on that.

Senator Cordon. It will be in the record?

General Chorpening. Yes, sir.

UPPER MISSOURI RIVER

Senator Kem. Now, I want to say a little bit about the upper Missouri, the river above Kansas City. You understand, Kansas City is at the confluence of the Kansas or Kaw River, and the Missouri River.

It happened in this case that the great rainfall occurred in the State of Kansas, in the basin of the Kansas River, and it was a very fortunate circumstance that at that time there was not a heavy rainfall at the same time above Kansas City in the basin of the Missouri River.

If high water in the Missouri had coincided with high water in the Kansas, the results would have just been very bad indeed.

But it is obvious that it is not sufficient just to guard against trouble again in Kansas because it may break out in the upper Missouri River Basin the next time. We need a series of dams to hold the water in the upper Missouri and in its tributaries, like the Platte, the James, and main stream there.

Considerable work has been done, but my understanding is that it is not sufficient. I am not in a position to approve or disapprove any particular projects here.

I want to say that I favor appropriations to build whatever is necessary in the upper Missouri to get this job done.

PERRY COUNTY LEVEES

For several years past there has been a levee project under way in Perry County, Mo., on the Mississippi River.

Perry County is about half way between St. Louis and the Arkansas line—perhaps about a third of the way. It is a very fine agricultural land. A good deal of work has been done on this levee but the work has been dragging recently.

I understand the reason is the Corps of Engineers has not had enough money to work with.

Senator McClellan. That is not in the lower Mississippi jurisdiction?

Senator Kem. I do not know, sir. I do not know where the jurisdictional lines are.

Chairman McKellar. Cape Girardeau to the south.

Senator Kem. It is north of Cape Girardeau. It is the third county south of St. Louis.

I understand that the engineers have a supplemental estimate for the levee.

During this recent flood very strenuous efforts were made to prevent the water going over the top there and to save what already had been done from complete destruction. I think those efforts were largely successful. But it is a warning that we ought to speed up that work and get the levees in order so that they will permanently protect this area.

POMME DE TERRE PROJECT

There is another project being proposed on the Pomme de Terre River, which is a tributary of the Osage River.

The Osage is a river that originates in Kansas, where it is called there the Marais des Cygnes. It runs through Missouri and joins the Missouri River near Jefferson City, about halfway across Missouri.

South of the Osage River there is a tributary called the Pomme de Terre River. I understand there is a very good site there for a dam. It will hold a lot of water. An estimate has been made for $325,000 for planning the Pomme de Terre Dam. That dam is, I think, in very much the same position as these proposed dams on the Kansas River. It will prevent flooding of the Osage, which, in turn, might well flood the Missouri and cause a vast amount of damage.

Senator ELLENDER. Do you know if those projects have been authorized?

Senator KEM. No. I think we are just asking for $325,000 for planning on the Pomme de Terre.

General CHORPENING. The Pomme de Terre has been authorized.

Senator KEM. All you are asking now is planning money and not construction? Is that correct, sir?

General CHORPENING. That is correct.

Senator KEM. I hope the committee will see its way clear to make that $325,000 available for Pomme de Terre.

CAPE GIRARDEAU PROJECT

Now, I have already testified regarding the Cape Girardeau project and the importance of that. An estimate of $75,000 is being asked as planning money for this project. The residents of that city, whose business district is now under water—or was, the last I heard—hope that it will be possible to carry on that work with as much expedition as is consistent with sound construction. I hope very much this can be done.

ST. LOUIS AND ST. CHARLES SURVEYS

Then, in St. Louis City, St. Louis County, and St. Charles County, which is the county immediately north of St. Louis County, considerable planning is necessary. When we were there with the Public Works Committee recently, we went over the confluence of the Missouri and the Mississippi and we saw a large part of St. Louis County on the south side of the Missouri River and St. Charles County on the north side of the Missouri River under water.

A great deal of that is rich agricultural land, as good land as there is anywhere in the United States.

Because of reduced appropriations for the survey fund in recent years, the progress on this survey has come almost to a standstill.

When we were in St. Louis, the mayor and others called our attention to the fact that only one engineer was working on a survey of the situation in St. Louis City. They need at least $100,000 more, in order to complete this survey. The staff, on this survey, had been reduced to one engineer.

I hope, Mr. Chairman, that there will be a restoration of funds in sufficient amount to make the surveys in St. Louis City, St. Louis, and St. Charles Counties.

RESTORATION OF EMERGENCY FUNDS

There is just one more item I want to speak about and that is the restoration of the emergency funds. The damage in the valley of the Missouri River between St. Louis and Kansas City is tremendous. A great many of the dikes have gone out. When we were out there we saw places in the river where it was 12 miles wide. For example, the river stretched from the town of Waverly to the town of Carrolton, which is nearly 15 miles.

Of course, it has worked havoc on the protection works that are there now.

I understand that the engineers have a fund of $10,000,000 available as an emergency fund for the year 1952. They are working on that job now. They are, of course, spending a lot of money.

The House reduced the emergency fund for 1952 from $10,000,000 to $7,000,000.

In view of the emergency and the unforeseen circumstances that have come up, I do not know whether $10,000,000 is enough or not. It would seem doubtful to me that this is enough but the engineers, of course, will advise you about that. I want to express the hope that the committee will make available whatever emergency funds are necessary to restore those works between St. Louis and Kansas City.

Now, Mr. Chairman, it must be obvious that I have not attempted to make any comprehensive statement of what ought to be done to accomplish the results we have in mind. By mentioning a few of the projects I do not wish to be understood as being either opposed or in favor of others. It is my wish to cooperate with your committee, with the Public Works Committee, and with the Corps of Engineers in the accomplishment, in a wise and reasonable way, of the objective we are all agreed on, namely, protection against another such disaster.

Chairman McKellar. All right, sir; we are very much obliged to you.

Senator Kem. Thank you, sir, for your attention.

STATEMENT OF HON. BOURKE B. HICKENLOOPER, A UNITED STATES SENATOR FROM THE STATE OF IOWA

CLINTON PROJECT, IOWA

Chairman McKellar. Senator Hickenlooper.

Senator Hickenlooper. Mr. Chairman and gentlemen of the committee: This is a project at Clinton, Iowa, on the Mississippi. It is an authorized project. It has already been authorized by the Congress.

Chairman McKellar. Do you have a budget estimate for it?

Senator Hickenlooper. There is an engineers' estimate.

General CHORPENING. There is no budget estimate.
Chairman MCKELLAR. Is the work going on?
Senator HICKENLOOPER. The work is not going on.

WATER LEVEL RAISED BY FLOOD CONTROL DAMS

When the Government put in a series of dams up and down the Mississippi River to provide the 9-foot channel, they created, of course, a series of pools above these dams. Pool No. 14 is created by a dam about 20 miles south of Clinton, which backs the water up beyond, that is, to the north, beyond the town of Clinton, which is a city of about 30,000.

It raised the normal water level at Clinton somewhere in the neighborhood of 3 feet, I think it is a little less than 3 feet, which brought the normal water level over the sewer opening, the mouths of the sewer system of Clinton.

Now, when the water level in the river is normal and low, it seems to function fairly well, but the least rise in water backs all the raw sewerage up through the sewer system of Clinton, the downtown business section, and about two-thirds of the residential section of Clinton. It fills basements with raw sewage and it does it every year.

Senator CORDON. You do not have a sewage disposal plant for the city?

Senator HICKENLOOPER. No; they do not have. I think there is no dispute, because this has been recommended by the engineers repeatedly and their estimates have been put in. I think there is no dispute but what the Government's action in building these dams and raising the water level is directly responsible for this difficulty there.

Clinton's bonded indebtedness has long since been reached. Under their charter they cannot increase their bonded indebtedness to provide for the three pumping stations which are necessary to alleviate this situation.

TOTAL ESTIMATED COST

The Army engineers' estimate 2 or 3 years ago was three hundred and some thousand dollars. It is now $418,000.

Representative TALLE. Originally it was $250,000.

Senator HICKENLOOPER. They have just been unable to get the money although everyone recognizes, I think, that the Government should do this, and it is a Government obligation.

Now I know something about this because the people of Clinton have been sorely tried by this sewerage system at least once a year. If they get two slight floods a year they get the sewerage back in their basements and over the residential section twice a year, just as often as they get a rise in the Mississippi River, and it does not have to rise too much before it backs up.

I think the case is morally a sound one, and I think if there were such a thing as a legal liability against the Government, the legal liability is fully there and I think it is admitted.

The House did not put the appropriation in. We are asking that the Senate put it in.

Senator CORDON. May I inquire whether a budget estimate was requested for it?

General CHORPENING. No, sir.

Senator CORDON. Then that is because of the application of the criteria of last year?

General CHORPENING. That is correct.

Senator HICKENLOOPER. Representative Talle of the Second Iowa District, who represents the Clinton district, is here. He has more facts and is more familiar with the details than I am. I would ask that he go on in the interest of saving time.

STATEMENT OF HON. HENRY O. TALLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

Representative TALLE. Thank you, Senator.

Mr. Chairman and gentlemen of the committee, in the Middle West 1951 will long be remembered as the year of disastrous floods. The terrible havoc wrought in recent weeks by the rampaging Missouri was preceded last spring by severe floods on the Upper Mississippi.

FLOOD AT CLINTON, IOWA

On the night of April 26 the Mississippi River hit what is believed to be the all-time high ever reached at Clinton, Iowa—20.7 feet. Property damage was extensive, but the most serious problem was the menace to public health.

Unfortunately, the public health problem at Clinton is not merely a byproduct of floods. It is a 12-year-old problem that will remain until the Federal Government discharges its obligations. The history of the problem is as follows:

HISTORY OF PROBLEM

1. Under the Federal navigation project undertaken on the upper Mississippi in the late 1930's, a 9-foot channel was created by the construction of a series of locks and dams and by dredging.

2. Pool No. 14 of this project, extending from 20 miles below Clinton to 10 miles above the city, raised the average river stage 2.5 feet at Clinton.

3. As a result of the higher water stage, Clinton's main sewer outlets are now submerged below the river level; and, consequently, the discharge of sewage into the river is blocked.

HEALTH MENACE

Mr. Chairman, here, then, is the health problem involved. The Clinton sewers carry both sanitary and storm refuse. High water conditions at the sewer outlets cause the sewers to flow backward. This sewer backwater overflows in the streets, alleys, yards, and basements. The menace to health is only too obvious. Floods, of course, aggravate the situation. As a matter of fact, during the April flood which I referred to a moment ago, there were instances where rats, snakes, and fish, as well as raw sewage were forced through the sewer system into peoples homes. Let me quote a paragraph from a letter I received from the mayor of Clinton at the time of the flood:

Under heavy flow conditions, the accumulated contents of our sewers are spewed out of the manholes into the streets, into low vacant lots, and on the lawns and gardens of householders. In one district comprising 11 square blocks, the excess overflow finds its way into basement windows and doors, creating a grave health menace. The basements of over 4,000 homes are either partially or completely filled with sewage. We are now administering typhoid fever innoculations to every inhabitant of this city of over 30,000 inhabitants, to protect them from disease.

In short, the blocking of the sewer outlets by the higher river level now maintained at Clinton as part of the Federal navigation project has resulted in the formation of a huge cesspool under a large portion of the populated section of the city.

Just last Friday, July 27, a sanitary engineer from Dallas, Tex., Mr. H. R. Powers, who is an expert in his field, investigated the Clinton sewers at the invitation of the city officials. Here is what Mr. Powers had to say:

The condition of the Clinton sewers is terrible. I've been checking sewer lines for 18 years, and this is the worst I've ever seen. If the sewers running down hill to the river won't even function properly because of the high water level, how can you expect those to work which are in the level areas?

LEGISLATIVE ACTION

Now, Mr. Chairman, I want to review briefly the legislative action that has been taken to alleviate this problem.

Pursuant to a Senate resolution adopted in 1944, the Army engineers investigated the damages caused at Clinton by the creation of pool No. 14. The Engineers' findings and recommendations are set forth in Senate Document No. 197 of the Eightieth Congress. In brief, the Engineers take the position that "an equitable measure of the damages caused to Clinton by the operation of pool No. 14 is the cost of remedial works required to eliminate the adverse effect of the pool on these sewers."—I emphasize the words "required to eliminate the adverse effect of the pool on these sewers." The remedial works proposed by the Engineers consist of (*a*) the initial cleaning of the sewers, and (*b*) the construction of pumping plants and gates at three of the sewer outlets. The cost to the Federal Government was estimated at the time of the Engineers' survey—that is, in 1946—as being $257,770. This figure does not include the cost of rights-of-way which the city offers to furnish, or the cost of annual operation and maintenance also to be borne by the city.

Last year, that is in 1950, the Congress approved the engineers' recommendations by including the Clinton sewer project in the omnibus rivers and harbors authorization bill, which is now known as Public Law 516 of the Eighty-first Congress. That was the authorization referred to by Senator Hickenlooper.

EFFECT OF KOREAN SITUATION

Mr. Chairman, when the authorization legislation was approved last year, I was confident that the Federal Government was at long last ready to discharge its obligations to the people of Clinton. Then came Korea. And the President directed the Army engineers not to submit any project to the Budget Bureau for clearance unless it met certain specific defense criteria. Consequently, since this is a public

health project rather than a defense project, the engineers were expressly forbidden from submitting it to the Budget Bureau. In this connection, I quote from a letter addressed to me last month, under date of June 11, by Brig. Gen. C. H. Chorpening, Assistant Chief of Engineers for Civil Works, as follows:

> The criteria governing the preparation of the fiscal year 1952 budget was such that we could not include this project. In our recent memorandum to the House Appropriations Committee we went into this particular aspect of the subject rather thoroughly and pointed out that while the project does not meet the defense criteria, we felt that the menace to public health is of sufficient importance to warrant its careful consideration.

HOUSE SETS UP OWN CRITERIA

However, the Civil Functions Subcommittee of the House Appropriations Committee had also set up criteria of its own for screening river projects. The House subcommittee refused to deviate from an ironclad policy that it would absolutely not approve any project which was not included in the recommendations of the Budget Bureau. The subcommittee members were most sympathetic and most helpful, but they would take no action under the circumstances. Every member of the subcommittee made it clear that he considered the project meritorious and urgent. In fact two of the subcommittee members, on their own initiative, discussed the Clinton project when H. R. 4386, the bill now under consideration, was debated in the House on June 12.

Congressman Davis of Wisconsin had this to say:

> There are items which were called to the attention of our committee which we felt very keenly about. If the war situation were different, if we could get some definite figures from the Bureau of the Budget, there were some tiems which we would want to do something about. In that connection I think particularly of the situation at Clinton, Iowa, which was aptly called to our attention by the gentleman from Iowa (Mr. Talle), and some of the local officials who came to Washington. We referred him to the Bureau of the Budget. I think it was the unanimous feeling that if we could get the kind of facts we need to have, the committee would probably be willing to help solve a situation for which the Federal Government is entirely responsible.

And Congressman Ford of Michigan added the following:

> A group from Clinton, Iowa, presented a tremendous case, almost the best I have ever heard. The gentleman from Iowa (Mr. Talle) appeared with them. Let me give you the facts.
>
> About 7 or 8 years ago the Corps of Army Engineers in doing some work on the river built a dam. In building that dam the corps increased the water height of the river at Clinton by about 4 feet. Now when the floods come, Clinton is completely inundated. This year they had a flood at Clinton, Iowa, which inundated the entire town. As a result of that flood every citizen of Clinton, about 30,000 of them, had to be inoculated. To straighten out that problem would require about $270,000. The Corps of Engineers would have to do some work on the sewers to prevent them from backing up.
>
> Here is a situation that was the fault of the Federal Government; yet after a period of 7 or 8 years we have not done anything about it, and in the meantime 30,000 people of Clinton, Iowa, have to be inoculated to protect their lives. Despite this crisis, this committee under its criteria, and all of us were unanimous, had to say "No" to the Clinton project.

Mr. Chairman, the Federal Government has created the health problem at Clinton. The Federal Government acknowledges its liability. But even if this were not the case, the city of Clinton would be helpless to correct the problem. Clinton, you see, operates under

a State charter which limits its taxing and bonding powers. The municipality has reached the limit of these powers, and the financing by the city of major improvements to its sewer system is simply impossible.

EMERGENCY SITUATIONS REQUIRE ATTENTION

I realize as clearly as any Member of the Congress that a good many worthy projects must be deferred because of the war effort. But there are emergency situations not directly related to defense which require immediate attention. For example, only a few days ago, we acted promptly and forcefully, and unanimously, I believe, to provide $25 million to help relieve the flood disaster in the Kansas City area. I was very happy to support that resolution. The Clinton sewer problem is in the same category. The health of 30,000 American citizens is involved. With the Clinton sewer outlets below the river level at the stage maintained by the Federal navigation project, it is inevitable that the health problem will continue until pumps are installed at the sewer mouths.

Mr. Chairman, the Congress cannot justify further delay in meeting its obligations in this instance. As a matter of fact, the delay already experienced has added materially to the cost of the project. As I pointed out heretofore, when the engineers made their survey in 1946, the cost of repairing the sewers was estimated at $257,770. Today, 5 years later, because of increased labor and materials charges, the cost of the project is estimated at $418,000 by the Army engineers. In this connection, I cite another paragraph from the letter of date June 11 addressed to me by General Chorpening, as follows:

> I should like to point out again that the project as authorized directs us to pay to the City of Clinton $257,770, when such funds are appropriated. When the study was made in 1946, that amount of money represented the cost of remedial works to correct the damages. Due to the increased cost of construction, that figure is now insufficient. We estimate, based on existing price levels, that the present cost of remedial works will be something in the neighborhood of $418,000.

Senator CORDON. May I interrupt you, Congressman, to ask you whether the report contemplated the payment of money to the city and the construction of remedial works by the city, as distinguished from an appropriation of funds to the Corps of Engineers and the construction of the remedial work by the corps?

Representative TALLE. My understanding is that the construction will be carried on under the supervision of the Army engineers.

Is that not correct, General?

FUNDS TO BE PAID TO CITY

General CHORPENING. I believe not, sir. I believe, as contemplated in the report, funds would be paid to the city as they did this construction. I would want to review that exact language, but that is my recollection of the language in the survey document.

Senator CORDON. May I ask, Mr. Chairman, that the gentleman furnish the committee with a statement, and if the work is to be done by the Corps of Engineers, that the statement include an estimate of the amount to be used for the current fiscal year, or, if it is to be paid

to the city, an estimate of the amount to be paid there that should be paid by the Corps of Engineers for inspection in the same period.

(The statement referred to is as follows:)

STATEMENT SUBMITTED BY HON. HENRY O. TALLE, MEMBER OF CONGRESS FROM THE SECOND DISTRICT OF IOWA

Mr. Chairman, several questions were raised by members of your committee day before yesterday (July 30, 1951) concerning the Clinton, Iowa, sewer project. As soon as the hearing adjourned, I contacted by telephone the city engineer of Clinton, Mr. Benton R. Anderson, and I may now report the following:

Senator Cordon requested information as to who would perform the proposed remedial work, the Army engineers or the city of Clinton. In reply, I may say that Senate Document No. 197 of the Eightieth Congress, which is the basis for the authorization of this project in Public Law 516 of the Eighty-first Congress, recommends that settlement of the claim be made by direct payment to the city of Clinton. In this connection, however, I may say that the officials of the city of Clinton will be satisfied to have the actual construction carried on by the Army engineers or by private contractors under Army engineer supervision, if the Congress prefers either of those methods for settling the claim to the direct-payment method.

Senator Cordon also wanted to know how much of the funds would be expended during the 1952 fiscal year, ending next June 30. City Engineer Anderson states that, if the requested $418,000 is appropriated during the present session of the Congress, he proposes to advertise for bids this fall and to complete all preliminary work before spring. He says further that the cleaning of the sewers and construction of the pumps can be completed within 120 working days.

Senator Ecton inquired as to whether the city officials of Clinton had ever considered the possibility of installing a modern sewage-disposal plant. In reply, the city engineer states that the proposal has been under consideration for several years; that the cost would be approximately $2,000,000—$1,000,000 for installing an interceptor sewer to separate the sanitary refuse from the storm refuse, and $1,000,000 for erecting the disposal plant. Unfortunately, the city of Clinton is not financially able to undertake this project at the present time.

In any event, the city engineer asked me to inform your committee that the construction of modern sewage-disposal facilities, as suggested, would necessarily be an addition to the present sewer system. He pointed out that neither the interceptor nor the disposal plant could be built until pumps are installed at the present sewer mouths, and furthermore that the pumps would always be required to force the storm refuse and sewage (whether raw or purified) into the river.

Mr. Chairman, I want to emphasize again that the city of Clinton is financially helpless to solve this serious problem which is admittedly the direct result of the raising of the river level in connection with the Federal navigation project. Settlement of the claim is long overdue. The emergency is grave. The health of 30,000 American citizens is involved. On behalf of both Senators from Iowa and myself, I urge favorable action by your distinguished committee.

General CHORPENING. May I make a further statement, sir?

FURTHER AUTHORIZATION MAY BE NEEDED

The document, I believe, is so written that further authorization would be required for the expenditure of more than $257,000, unless, of course, this committee included more. But I think the authorization is so worded. I wanted to bring that point out.

Senator ECTON. Did that just relate to the changing of the sewer system, General?

General CHORPENING. Putting in pumps to handle it.

Senator ECTON. That would have nothing to do with a sewage-disposal plant?

General CHORPENING. No, sir.

Senator MCCLELLAN. Who would operate the plants?

General CHORPENING. Local interests; the city.

Senator CORDON. It seems to me a case where the Government itself has created a condition and definitely owes an obligation to correct it.

I would like to see adequate information in the record upon which the committee could act insofar as it can act.

General CHORPENING. Yes, sir.

Senator ECTON. I would like to ask the gentleman what he thinks about this. I think we all realize that the blame for this falls upon the Federal Government, whether there is fault or not.

Representative TALLE. That is right, Senator.

QUESTION OF SEWAGE-DISPOSAL SYSTEM

Senator ECTON. Would it not be better to fix it up some way to make this applicable toward paying for a sewage-disposal plant for the city of Clinton, rather than to change the sewer system and keep dumping that raw sewage right into the river? It creates more and more pollution.

I want to help you, but it seems to me like it would be a much more practical approach if we fixed it out some way so that you could get a proper sewage-disposal system; because I think the time is coming, Mr. Chairman, when every city in the whole United States that is located on these rivers has got to maintain a sewage-disposal system. I think it is terrible to dump raw sewage into these streams and then expect people below to have to drink the water. And they are doing it. It is wrong.

Representative TALLE. I may say, in reply, Senator, that I am pursuing this on the basis of the recommendations of the Army engineers.

Senator ECTON. Yes, I understand that. I am not blaming you at all, you understand.

But it just seems like there should be brains enough in this country wo work out some kind of a system whereby the Federal Government could help cities like this and quit dumping this raw sewage into the streams.

Senator CORDON. Do you know whether the city of Clinton has ever given consideration to the application of the total amount of Government responsibility in dollars toward a sewage-disposal plant?

Have they ever considered it at all?

Representative TALLE. That I do not know, Senator.

Senator CORDON. Could you determine it for us?

Representative TALLE. Yes; I am confident I can get that information from the city engineer at Clinton. He is a very capable man.

Chairman MCKELLAR. Suppose you take it up with the city engineer and let us know.

Representative TALLE. I will be very happy to do that, Mr. Chairman.

May I make my concluding statement, Mr. Chairman?

Chairman MCKELLAR. Yes, indeed.

Representative TALLE. I therefore urge that H. R. 4386, as passed by the House, be amended on page 5, line 24, by striking out "$162,860,500" and inserting in lieu thereof the following:

$163,278,500, of which amount $418,000 shall be available for the Clinton Iowa, project authorized by Public Law 516 of the Eighty-first Congress.

I want to thank you and your distinguished committee, Mr. Chairman, for the opportunity to testify in support of the claim of the city of Clinton, Iowa, for the restitution of damages to its sewer system. I feel confident that the claim will receive from your committee the favorable consideration it deserves.

Chairman McKellar. All right, sir.

We are very much obliged to you.

Representative Talle. Thank you.

Chairman McKellar. Senator Hennings?

STATEMENT OF HON. THOMAS C. HENNINGS, JR., A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

Flood Control Projects

Senator Hennings. Mr. Chairman and gentlemen of the committee, I first want to tell you that I am most grateful for this opportunity to appear before the committee at this late hour in the interest of several projects which are of great importance to the people and the State of Missouri. I have delayed my testimony in order to go out to Missouri and see at first hand the devastating results of the present flood and talk with the people in the affected areas of my own State as well as in the neighboring States of Kansas and Oklahoma.

I was very glad that several members of this committee were able to take the time to go along on this trip. I am sure that the other Senators who were with us returned with a clearer understanding of what the members of this committee have long known, the importance of the civil-functions program in relation to the lives, health, safety, and welfare of our people, and the vital role of this program in preserving production and commerce and the economy of our Nation.

I might say, Mr. Chairman and gentlemen of the committee, that I have prepared an index to this statement. I do not intend to read all of it. There are some eight pages closely typewritten.

Chairman McKellar. You may insert it in the record and make such remarks as you wish.

Senator Hennings. I would like to insert it, Mr. Chairman, if I may, but if I may ask your indulgence, I would like to read certain portions of it, without suggesting by so doing that I would minimize any of the other portions which I have not read.

I prepared it in four parts, dealing with flood control and the several projects, including soil conservation, additional flood-control funds, and the specific projects in that connection; rivers and harbors; planning and surveys; and ferry landings, which is another very important phase of this whole question, in my judgment.

In July 1950, the President directed the Corps of Engineers to review its entire program, as you gentlemen know, in the light of the present international situation and to curtail or postpone work wherever possible in order to lessen the demands on resources and manpower needed for the defense program. I believe this action was entirely proper; but at the same time I believe that we must remain flexible enough to meet emergency situations when and as they arise, and also that we should refrain from suspending projects already well underway that would involve a considerable financial loss to the Government in contractual commitments and that we must guard

against curtailing projects that would contribute greatly to the defense effort.

The topography of the State of Missouri falls into three divisions with its upland plain or prairie section of rolling terrain in the north, comprising about half the State, the Missouri part of the Ozark uplift in the central and southern portions, and the section of lowland area in the southeast. The entire eastern boundary of the State is the Mississippi River. On the west the northern half of the State is bounded by the Missouri River which flows entirely across the center of the State from Kansas City; and the entire State is covered with numerous streams and tributaries of the Mississippi and the Missouri.

The average annual precipitation in normal years ranges from 50 inches in the southeast lowland section to about 32 inches in the northwestern corner. Because of these three factors, the character of the terrain, the network of streams, and the intense precipitation at certain seasons—many localities throughout the State are subject to serious flood problems. I would like to make brief statements about some of these areas and the projects proposed or under construction, for which I believe funds should be appropriated.

BULL SHOALS DAM AND RESERVOIR, ARK.

The Bull Shoals Reservoir is one. The Bull Shoals Dam site is located on the White River in north central Arkansas, but the reservoir extends upstream into Missouri. The project is now about 77 percent complete. The budget request for fiscal 1952 of $14,960,000 would bring the project to 96 percent of completion. The project provides for flood protection in the White River Valley below the dam site and in the lower Mississippi River. The structure will include initial power installation for 40,000 kilowatt units, the first of which is proposed to go on the line in March 1952, with the other three to follow at 2-month intervals. Ultimately eight such units are proposed providing a total of 300,000 kilowatts. It is estimated that the power revenue from this project will be about $3,450,000. The Bull Shoals project is located only a short distance from Norfork Reservoir which has a power capacity of 70,000 kilowatts and is now in operation. The two will be interconnected and operated as one unit. The power will be delivered to the Southwestern Power Administration for marketing.

RESTORATION REQUESTED

The National Security Resources Board has pointed to the power shortage in that area, and the urgent need for additional power to meet defense requirements. The House approved $14 million, but I hope that this committee will restore the full amount of the budget estimate of $14,960,000 so that the work can proceed on the Bull Shoals units as expeditiously as possible, in order to meet known defense power needs.

AGRICULTURAL LEVEES AND DETENTION DAMS

This next section, that I would like to read briefly, is the Missouri River agricultural levees and upstream holding reservoirs.

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This project consists of a series of levees and appurtenant works along both banks of the Missouri River from Sioux City, Iowa, to the mouth and is designed to protect the agricultural land and small communities in this area against floods. When completed it is contemplated that the 1,586 miles of levees will afford protection to approximately a million and a half acres of land and some 50 small communities. Out of the total of 153 individual levee units 81 are within the State of Missouri, comprising 945 miles of levee and affording protection to 630,000 acres of agricultural land 32 communities.

Three of these units are presently under construction, while four of the levees have already been completed and have prevented damages of approximately $650,000 prior to the present disastrous flood. Prior to the present disaster, severe floods had occurred along the main stem of the Missouri River below Sioux City in 1943, 1944, 1945, 1947 and 1948. Damages resulting from these floods totaled approximately $175 million, of which $65 million was caused by the severe flood of 1947.

TOTAL ESTIMATED COST AND EXPENDITURES TO DATE

The estimated total cost of this project is $124,837,000, of which $23,987,600 has been appropriated to date. During normal times the appropriation should be in the neighborhood of at least $10 million annually in order to complete the project in 10 years.

1952 BUDGET ESTIMATE

The budget estimate for fiscal 1952 is $2,312,000 and the House reduced this amount to $1,500,000. It can readily be seen that at this rate the project could not be completed for many decades. I believe that the full amount of the budget estimate should be restored so that work could proceed as planned to insure the security of the residents of this fertile valley and permit increased production of farm commodities, so urgently needed in expanding our defense effort.

The severe flood on the Missouri during the past weeks, as this committee well knows, has brought havoc to Kansas City and the entire area across the center of the State to St. Louis and on down the Mississippi below St. Louis. The members of this committee who accompanied us on our recent trip into the flood area have seen the extent of the destruction. They know that when we speak of 2 million acres flooded, over 500,000 persons displaced, damages of a billion dollars, mile upon mile of transportation and communication systems disrupted, livestock destroyed, crops ready for harvesting ruined, industrial areas swamped, none of these phrases which have been used over and over again in describing the results of this flood can begin to give a true picture of the utter devastation and waste and human misery which we found and the heartbreaking and backbreaking job of rehabilitation.

There is, I believe, unanimous agreement that it is the responsibility of the Congress to see to it, insofar as is humanly possible, that a tragedy of this sort does not occur again.

I do not propose today to enter into any discussion of the merits of the various controversial plans put forth to solve the water prob-

lem in the Missouri Valley. The proponents of each of the various plans are convinced that their particular plan is the best and only possible solution. Competent engineers, economists, reclamationists, agronomists, and interested citizens have offered suggestions, but their views, of necessity, arise from their professional or economic or sectional loyalties. For my own part, I do not profess to be a flood-control expert. I've been reading and studying for many months in order to inform myself to the best of my ability on the most effective way of meeting this problem. I have publicly stated on many occasions my belief that we must put an end to juridictional disputes and conflicting interests and work out once and for all an integrated, comprehensive, long-range program for controlling and utilizing the vast water resources of our Nation. Our national welfare and the security of our country are so closely tied to the harnessing of our water resources that we can no longer afford a piece-meal approach. The Missouri Valley is but one facet of the tremendous planning job which should be undertaken promptly.

Regardless of what over-all plan is ultimately achieved for the administration of water programs, I believe that there is substantial agreement at this point that certain basic construction now authorized or under way could have prevented to a very large extent the damage caused by the present flood. I talked a moment ago about the agricultural levees along the Missouri. I think it is important to recognize that the height of these levees is predicated on certain upstream reservoirs being in operation.

Is that not true, Colonel?

Colonel MILNE. That is correct.

TUTTLE CREEK RESERVOIR, KANS.

Senator HENNING. One of the most important of these is the Tuttle Creek Reservoir on the Big Blue River in Kansas which would afford early relief to the area along the Kansas and Missouri rivers. This project has been authorized but has received only planning funds to date. The engineers, I understand, could effectively utilize $5 million in the first year for construction work on this reservoir and I earnestly hope that this committee will see fit to approve these funds so that construction can be initiated on this project.

Is my figure of $5 million approximately correct?

Colonel MILNE. It is.

HARLAN DAM AND RESERVOIR, NEBR.

Senator HENNINGS. Five other upstream reservoirs are already under construction and work should be expedited on all of them. Harlan County Reservoir in Nebraska is almost complete. The $3,344,000 requested for fiscal 1952 would bring this project to 99 percent of completion, and I understand that funds to be requested in the future will be for necessary reservoir management and final costs on relocation work. I hope this committee will approve the full budget request so the maximum benefits can be achieved from this project.

GARRISON DAM AND RESERVOIR, N. DAK.

In addition, I hope the committee will recommend the full budget amount of $37,083,700 for Garrison Reservoir in North Dakota which is now 42 percent complete.

FORT RANDALL DAM AND RESERVOIR, S. DAK.

$34,699,000 for Fort Randall Reservoir in South Dakota which is now 46 percent complete.

OAHE DAM, S. DAK., AND GAVINS POINT DAM, NEBR.

Two other reservoirs important to this chain of holding reservoirs are Oahe in South Dakota and Gavins Point in Nebraska, both of which are barely started. In order to provide for an integrated and effective program, I believe that construction funds in the amount of $3,770,000 for Oahe and $5,000,000 for Gavins Point should be approved at this time.

LEVEE CONSTRUCTION

In addition to the holding reservoirs the levee units downstream from Kansas City are urgently needed and some of them should be started at an early date. This is particularly true in the Portage des Sioux area near the confluence of the Missouri and Mississippi where about 30,000 acres of rich land is subject to flooding by both rivers. This area also contains numerous communities and important transcontinental railroads and highways. For the protection of this entire area I would like to see this levee unit (15–L) completed at an early date.

While the completion of the upstream reservoirs will reduce flood heights to insure a higher degree of protection to the leveed areas and permit better utilization of the unleveed areas, I believe, also, that all of these flood control measures should be supplemented by soil conservation measures.

I can see no conflict between flood control and soil conservation but rather I view them as a team working together. Topsoil, of course, is one of the basic resources of our Nation and when it is removed the productive value of the land is imperiled. In other words, the two programs complement each other. Soil conservation is necessary to retain the topsoil and the moisture on the land and to keep sediment out of the stream channels and reservoirs. On the other hand, the authorized levees and reservoirs are needed to protect the bottom areas from overflow from the run-off of heavy rainfall in the hilly regions of most of Missouri where the rainfall exceeds the retention capacity of the soil.

Senator Kem dwelt somewhat on that, so I will pass over that, gentlemen, and pass on to one more project, after which I will not further trespass upon the indulgence of this committee.

FLOOD DAMAGE, CANTON, MO.

In May of this year, two months before the flood waters started rampaging down the Missouri, the community of Canton in north-

eastern Missouri experienced another major flood. Canton is a small community of some 2,500 inhabitants. It is a trade center for several counties in the area and contains a number of small industrial plants, grain storage facilities, and a liberal arts college.

Because Canton is such a small community, the damage wrought here did not receive the immense amount of publicity that was given to the more extensive flood on the Missouri. Nevertheless, I heard from practically every citizen of this small town of Canton, and I have here some photographs, which I would like to file with the clerk of the committee.

Chairman McKellar. That may be done.

Senator Hennings. They indicate to some extent the damage that was done in this community of Canton.

This is hardly a new experience for residents of Canton. Major floods have occurred in 1929, 1937, 1938, 1939, 1944, 1945, 1947, and 1951. Within the city limits these floods overflow the entire commercial and business area, as well as the major portion of the residential area. Damage this year is probably close to a quarter of a million dollars. There is no question that the growth of this community is curtailed as long as it is subject to flood as it is at the present time.

CANTON LEVEE PROJECT

In the Eighty-first Congress a flood-control project for Canton was authorized. The estimated Federal cost at that time was $1,086,500. Due to rising prices, the cost has increased to $1,338,000 at the present time. The project is authorized subject to the provision that local interests would furnish necessary rights-of-way, contribute toward the cost of modifying existing structures, and maintain and operate the completed works. The cost to local interests is estimated at $73,600. The project in addition to protecting the commercial and residential sections of the town would protect against traffic interruption to the main line of the Rock Island Railroad and on United States Highway 61, a transcontinental highway.

Some residents are of the opinion that flood heights at Canton have been increased by construction and operation of lock No. 20 on the Mississippi River immediately above the town.

I do not know how fully that is sustained, General.

General Chorpening. I am not sufficiently familiar with it to be able to make a statement on that, Senator.

Senator Hennings. If such is the case, the Government is under a moral obligation to alleviate the situation. There is little doubt that the agricultural levees on the Illinois side of the river opposite Canton tend to increase flood heights in that area; just as you gentlemen of the committee may remember is said to be true of the situation at Cape Girardeau. Some of that Illinois water was thrown over on to the Missouri side.

The Army engineers have recommended that these levees be raised to provide that Illinois farming area with a higher degree of protection.

I happen to know the Canton area, because, as a boy, I worked on farms up there during the harvest seasons. I know the city of Canton and I know that surrounding it is some of the best land we have in the whole State—very rich, fertile land.

The Illinois work has not been authorized, but the project at Canton should be completed in advance of raising those levees in all probability.

Since the sum of $1,338,000 would provide for the initiation and completion of this project within 1 year, I do respectfully ask and hope that the members of this committee will give earnest consideration to including this item in the appropraition bill, in order to eliminate the serious flood conditions that have confronted this small community year after year, and permit the residents to live and work in some degree of security.

SURVEY OF 1951 FLOOD DAMAGE

I would like to have you include in the record the letter I have received from the board of education in Canton, and a survey of the 1951 flood damages, conducted by the Canton Chamber of Commerce.

Chairman McKellar. Without objection, that may be done.

(The material referred to is as follows:)

1951 Flood Damage to Canton, Mo.

(A survey conducted, compiled, and edited for Canton Chamber of Commerce, by Melville Peterson, assistant professor of economics, Culver-Stockton College, Canton, Mo.)

I. INTRODUCTION

On March 30, 1951, the rising water in the Mississippi River passed the flood stage and continued to rise until May 12, 1951, when it reached its crest and then gradually receded. During this time the water reached into many of the homes which are located near the river and continued to rise until a good portion of the business district was under water. United States Highway 61, which runs north and south through the main part of the business district and is the main traffic artery into Canton, was completely closed at both ends by the rising water. In order to ascertain, with a reasonable degree of accuracy, the damage and loss of business which this flood inflicted upon Canton, a survey was conducted in which each businessman in Canton was asked to what extent the flood caused a reduction in his sales volume; how much damage was caused to his buildings, how much he spent to protect his property from damage, and how much it cost him to clean up his property after the floodwaters receded. Since Canton's public-school system is also in the flood district, the damage inflicted upon the school buildings is also included in this report as well as the money spent by the American Red Cross in caring for the families who were flooded out of their homes and the rehabilitation of their homes. This survey shows that at a minimum, the direct, measurable cost of this flood to Canton was $230,913.30—a large sum for a community the size of Canton. How, and in what way this cost was incurred is shown in the following pages of this report. Every effort was made to keep these figures as conservative as possible.

II. DECREASE IN SALES VOLUME, AND LOSS OF WAGES

Canton's businessmen were particularly hard hit by the flood since it was difficult, and part of the time impossible, for shoppers to reach Canton. As shown in table 1, 71 percent of the businesses in Canton showed a loss in sales volume as a direct result of the flood. This loss amounted to $147,059. As can also be noted in table 1, this loss was suffered by 59 percent of Canton's businesses. The other 16 percent of the businesses reporting a decrease in sales volume could not give a reasonable estimate of the loss to them in terms of money. Therefore, this loss figure is a conservative one, and the actual loss is greater than it appears.

A decrease in sales volume was inevitable as the flood made it impossible for many people to come to Canton where they normally do their shopping. In some respects, the $147,059 decrease in sales volume is only the immediate and measurable cost to Canton businesses. Because of the floods in recent years, Canton is getting a bad reputation and is becoming a poor place in which to shop. In addition to that, many people who are forced to do their shopping elsewhere

during the flood do not return to Canton to do business. This is a serious threat to Canton's future as well as to the future of Canton's businesses.

Another long-range, immeasurable cost to Canton is the fact that Canton is rapidly becoming a poor town in which to situate new businesses unless some counteracting measure is taken to assure that floods will not occur in the future.

Table 2 shows another serious cost of the flood to Canton. This table shows that 148 employed workers lost a total of 320 days of work and $7,892.80 in wages as a direct result of the flood. As this table indicates, 28 employees received their wages even though their places of employment were not operating. Some of these were sent to work on the levee along the north side of Canton, but the employer was actually losing the wages he paid as he received no direct benefit from them. These 148 unemployed people lost a total of 47,360 man-days of work—work which is gone forever. If one man had lost that many days of work, he would have been unemployed for 131.6 years.

III. DAMAGE TO BUSINESS PROPERTY, COST OF PROTECTING PROPERTY FROM FLOOD, AND COST OF CLEANING UP PROPERTY

The dollar amount of damage which was done to business property by the floodwaters is shown in table 3. This amount totals $26,920. This is a conservative estimate as the floodwater causes an excessive amount of depreciation to buildings which is difficult to measure in terms of money. By washing in and around the footings of the buildings, the life of these buildings is actually shortened.

Some businessmen were able to prevent this damage to their property by building sandbag barriers around their buildings in order to keep the water out. Those who could not do this, simply had to raise their stock and fixtures above the floor level so that the water could not reach those items. Accomplishing these two things cost Canton businessmen a total of $19,936.50. This figure also includes the cost of pumping seep water from behind the sandbag barrier. These sandbag levees were successful in keeping the water from reaching their buildings, but the cost of putting them up every few years is prohibitive as they must be removed as soon as the water recedes.

As the floodwaters recede, several inches of mud is left on everything which the water covered. This mud, of course, must be cleaned up as quickly as possible as it is a threat to the health of the community. It would also cause the rest of the community to become an eyesore as dust would settle over the entire town as soon as it dried. The cost of cleaning up the business district amounted to $16,105—another prohibitive cost if it must be borne year after year.

Table 3 shows all of these costs and summarizes the cost of the flood to Canton's businesses, a total of $217,913.30. This is a terrific loss to a town the size of Canton.

IV. LOSS TO THE FAMILIES IN THE FLOODED AREA AND TO THE CANTON PUBLIC SCHOOL SYSTEM

As the floodwaters rose, 170 of Canton's families were driven from their homes. Most of them were fortunate enough to be able to move their furniture and clothes before the water reached them, but the damage done to their homes could not be avoided. The American Red Cross came to their aid and took care of them during this time, and this institution reported that it will cost them about $2,432.22 for this service. The Red Cross also reported that it cost them $567.78 to feed 200 levee workers for 12 days. The Red Cross further stated that during the flood of 1947, it spent $14,195.45 for similar services.

These figures do not include the damage which was done to their homes. The survey did not attempt to cover this item since most of the buildings were still surrounded by water at the time the survey was conducted.

The last cost of the flood covered by the survey is that loss suffered by Canton's public school system. Canton's school buildings are located in the flood area. This was not due to poor planning but is due to the fact that when these buildings were built floods had never reached these areas. The school board and the superintendent have estimated that the recent flood damaged the school buildings to the extent of $10,000. It was also necessary to remove the floor and the subflooring from the gymnasium in order to prevent them from being damaged by seep water.

In addition to this, 460 students were out of school 20 days—a total of 9,200 student-days of education missed. If one student were forced to miss this number of days (20) every year for the 12 years in which he would be in attendance at Canton's schools, he would have missed 6.2 percent of his education.

If the floods in Canton continue as they have in the past, the students of Canton's schools will lose a substantial part of their education—a serious loss to the community as a whole.

TABLE 1.—*Decrease in sales volume caused by flood conditions in Canton, Mo. (period covered, Mar. 30 to May 16, 1951)*

	Amount of decrease	Number of businesses	Percentage of total number of businesses [1]
Decrease in sales volume	$147,059	59	55.0
Businesses reporting decrease in sales volume but giving no estimate of loss		17	16.0
Businesses unavailable		2	1.8
Businesses reporting increase in sales volume		1	.9
Businesses refusing to answer		1	.9
Businesses missed by the survey		1	.9
Total	147,059	107	100.0

[1] Percentages do not total 100 percent due to rounding.

TABLE 2.—*Loss of wages and working time as a result of the flood. (Period covered Mar. 30 to May 16, 1951)*

	Number of employees	Number of days unemployed	Amount lost in wages
Employees unemployed by the flood and receiving no wages during that time	120	281	$7,892.80
Employees unemployed by the flood and receiving wages during that time	28	39	
Total	148	320	7,892.80

NOTE.—Number of man-days of work lost due to the flood, 47,360.

TABLE 3.—*Damage caused to property, cost of cleaning property up, cost of protecting property from flood, and summary of costs shown in table 1 and table 2 and table 3.*

Reason for cost	Amount	Number of businesses reporting the loss shown
Damage to business property	$26,920.00	[1] 26
Cost of protecting property from the flood	19,936.50	61
Cost of cleaning up property after water receded	16,105.00	36
Decrease in sales volume caused by the flood (from table 1)	147,059.00	[2]
Loss in wages due to the flood (from table 2)	7,892.80	
Total immediate, monetary cost to Canton businesses	217,913.30	

[1] Of these 26, 3 gave no dollar estimate of damage, but stated that their property had been damaged.
[2] See table 1.

CANTON SCHOOL DISTRICT R–V,
Canton, Mo., May 16, 1951.

Hon. THOMAS C. HENNINGS, Jr.,
United States Senator,
Senate Office Building, Washington, D. C.

DEAR MR. CONGRESSMAN: The Board of Education of Canton School District R–5 met in regular session on the night of May 15. By unanimous opinion it was decided to notify you of the appalling flood conditions here in Canton caused by the ever increasing amount of water in the Mississippi River.

The entire town and surrounding community suffers tremendously when these floods occur. To give you a bird's-eye view of the effect we had approximately 68 business firms directly affected by either being in the water or surrounded by

water. There were approximately 139 families that had to evacuate their homes. These families became a problem of the Red Cross for housing and feeding. The amount of business in dollars that has been lost cannot be estimated, but it is believed to run into many thousands of dollars. The physical damage done to dwellings and business buildings also runs into several thousands of dollars. These dollars lost are a "dead loss" because there is no possible way of receiving remuneration for same. Insurance does not cover this type of loss. There is no way of recovery. It is gone or lost forever.

Canton, it is granted, is a small community, but it is our home and our life and we want to preserve it. We want it to progress. We want it to prosper but it cannot do these things when we have to live in dread of floods occurring almost on the annual basis. We have suffered three major floods in the past 7 years. One in 1944, another in 1947, and the current flood of 1951.

By virtue of being the school board we are primarily interested in the school building and the effect upon the system. Approximately 1 month of school was completely lost. Four hundred and sixty pupils lost 9,200 days of learning.

Three veterans classes were affected. These classes were attended by 75 of our local farmers. The physical damage to the main school building is estimated to be $7,000 to $8,000. The colored school is damaged approximately $1,000 to $1,500. The Vocational Agriculture Building, which is new, is damaged $1,000 to $2,000. The total loss to the school system is estimated at $10,000. To suffer losses like this repeatedly does not offer a chance for advancement or progress. All we can do is stand still and try to keep up with the necessary repairs. In our way of thinking this isn't fair to the local tax paying people.

After the 1947 flood the United States engineers were consulted and plans for a levee and sea wall were prepared for Canton. These plans have passed all the necessary steps except the final and most important one. That is the appropriation of the necessary funds to do same. We as individuals, and as a board and all the people of this community would greatly appreciate an effort on your part to investigate our plight and urge the appropriation of the necessary funds or dollars.

The Federal Government has given funds toward the building of levees and dams, in our immediate vicinity, and up and down the river. It is the general consensus of opinion that these projects have been a contributing cause to these recent floods. If this is the case then doesn't it stand to reason that the Federal Government should come to our aid in trying to prevent the repeated damage we are subjected to?

Thank you for helping us in trying to protect our property and community.

Very truly yours,

BOARD OF EDUCATION,
J. H. HARTMANN,
ALBERT R. BAUGHER,
LOUIS F. BOEGER,
R. MARVIN ZENGE,
HENRY LLOYD,
MERLE STORK.

CAPE GIRARDEAU PROJECT

Senator HENNINGS. Although I appeared, gentlemen, briefly before this committee several days ago in connection with the planning funds for Cape Girardeau, I would like to stress again to you gentlemen of the committee the urgent need for planning funds prior to the construction of levees in that locality.

The members of this committee that were with us on our recent trip to that flood area saw at first hand the damage that was done there and the magnificent spirit of the people of that community in the face of such destruction; $75,000, I understand, General, is needed for planning.

General CHORPENING. That is correct.

Senator HENNINGS. And I hope this committee will approve it.

POMME DE TERRE PROJECT

I am also requesting planning funds in the amount of $325,000 for Pomme de Terre and $1 million in further construction funds for the Perry County levee district.

I would also like to see prompt approval of the $15 million requested for emergency repairs and bank stabilization needed as a result of the present flood. In this connection, I would like to point out that although the present flood area should have priority as far as these funds are concerned, they would nevertheless be available for use anywhere in the United States.

And now, Mr. Chairman, I want to thank you and the members of your committee for your indulgence, and would like to request your permission to file the entire statement.

Chairman McKellar. All right.

(The statement referred to is as follows:)

STATEMENT OF HON. THOMAS C. HENNINGS, JR., A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

PART I. FLOOD CONTROL

Introduction

I am grateful for the opportunity to appear before this committee at this late hour in the interest of several projects which are of great importance to the people and the State of Missouri. I have delayed my testimony in order to go out to Missouri and see at first hand the devastating results of the present flood and talk with the people in the affected areas of my own State as well as in the neighboring States of Kansas and Oklahoma. I was very glad that several of the members of this committee were able to take the time to go along on this trip. I am sure that the other Senators who were with us returned with a clearer understanding of what the members of this committee have long known—the importance of the civil functions program in relation to the lives, health, safety and welfare of our people and the vital role of this program in preserving production and commerce and the economy of our Nation.

In July 1950, the President directed the Corps of Engineers to review its entire program in the light of the present international situation and to curtail or postpone work wherever possible in order to lessen the demands on resources and manpower needed for the defense program. I believe this action was entirely proper; but at the same time I believe that we must remain flexible enough to meet emergency situations when and as they arise, and also that we should refrain from suspending projects already well under way that would involve a considerable financial loss to the government in contractual commitments and that we must guard against curtailing projects that would contribute greatly to the defense effort.

The topography of the State of Missouri falls into three divisions with its upland plain or prairie section of rolling terrain in the north, comprising about half the State, the Missouri part of the Ozark uplift in the central and southern portions, and the section of lowland area in the southeast. The entire eastern boundary of the State is the Mississippi River. On the west the northern half of the State is bounded by the Missouri River which flows entirely across the center of the State from Kansas City, and the entire State is covered with numerous streams and tributaries of the Mississippi and the Missouri.

The average annual precipitation in normal years ranges from 50 inches in the southeast lawland section to about 32 inches in the northwestern corner. Because of these three factors, the character of the terrain, the network of streams, and the intense precipitation at certain seasons—many localities throughout the State are subject to serious flood problems. I would like to make brief statements about some of these areas and the projects proposed or under construction, for which I believe funds should be appropriated.

Lower Mississippi River

This project provides for the flood protection of the alluvial valley of the Mississippi—southward from Cape Girardeau by means of levees, flood walls, flood ways, reservoirs, bank stabilization, and channel improvements in and along

the river and its tributaries and outlets, insofar as affected by backwater of the Mississippi. In addition the project provides for bank protection, channel improvement and dredging from Baton Rouge to Cairo.

The main levees along the Mississippi are now about 70 percent complete. These levees protect an area of approximately 20 million acres and a population of about 3½ million. About 140 miles of these levees are located in Missouri below Cape Girardeau. Considerable levee work has already been completed and authorized for the St. Francis River in southeast Missouri. The Wappapello Reservoir on that stream is complete and in operation and has demonstrated its value in holding back floodwaters in that area.

The budget estimate for the lower Mississippi was $61 million, of which $46,500,000 is for construction and $14,500,000 for maintenance. The work in Missouri would be located in the Little River, Saint Johns Bayou and St. Francis districts along the main line levees. Bank stabilization works in the State would be constructed at Pritchard, Beckwith Bend, New Madrid, and Linda. An allotment of $500,000 would construct 8 miles of levee in Dunklin County, which is part of the St. Francis River project and affords protection to 1,930 square miles of rich agricultural lands and many small towns. The House has approved $59 million for this project for fiscal 1952. This slowing down on this project was recommended by the House before the recent flood. In view of what we have seen in recent weeks and the long recognized importance of this project for flood control and navigation, I question the wisdom of this action and hope that the committee will restore the full budget recommendation.

Bull Shoals Reservoir

The Bull Shoals Dam site is located on the White River in north central Arkansas, but the reservoir extends upstream into Missouri. The project is now about 77 percent complete. The budget request for fiscal 1952 of $14,960,000 would bring the project to 96 percent of completion. The project provides for flood protection in the White River Valley below the dam site and in the lower Mississippi River. The structure will include initial power installation for 40,000 kilowatt units, the first of which is proposed to go on the line in March 1952, with the other three to follow at 2-month intervals. Ultimately eight such units are proposed providing a total of 300,000 kilowatts. It is estimated that the power revenue from this project will be about $3,450,000. The Bull Shoals project is located only a short distance from Norfork Reservoir which has a power capacity of 70,000 kilowatts and is now in operation. The two will be interconnected and operated as one unit. The power will be delivered to the Southwest Power Administration for marketing.

The National Security Resources Board has pointed to the power shortage in that area, and the urgent need for additional power to meet defense requirements. The House approved $14 million, but I hope that this committee will restore the full amount of the budget estimate of $14,960,000 so that work can proceed on the Bull Shoals units as expeditiously as possible, in order to meet known defense power needs.

Missouri River agricultural levees and upstream holding reservoirs

This project consists of a series of levees and appurtenant works along both banks of the Missouri River from Sioux City, Iowa, to the mouth and is designed to protect the agricultural land and small communities in this area against floods. When completed it is contemplated that the 1,586 miles of levees will afford protection to approximately a million and a half acres of land and some fifty small communities. Out of the total of 153 individual levee units 81 are within the State of Missouri, comprising 945 miles of levee and affording protection to 630,000 acres of agricultural land and 32 communities. Three of these units are presently under construction, while four of the levees have already been completed and have prevented damages of approximately $650,000 prior to the present disastrous flood. Prior to the present disaster severe floods had occurred along the main stem of the Missouri River below Sioux City in 1943, 1944, 1945, 1947, and 1948. Damages resulting from these floods totaled approximately $175 million, of which $65 million was caused by the severe flood of 1947.

The estimated total cost of this project is $124,837,000, of which $23,987,600 has been appropriated to date. During normal times the appropriation should be in the neighborhood of at least $10 million annually in order to complete the project in 10 years. The budget estimate for fiscal 1952 is $2,312,000 and the House reduced this amount to $1,500,000. It can readily be seen that at this rate the project could not be completed for many decades. I believe that the full

amount of the budget estimate should be restored so that work could proceed as planned to insure the security of the residents of this fertile valley and permit increased production of farm commodities, so urgently needed in expanding our defense effort.

The severe flood on the Missouri during the past weeks—as this committee well knows—has brought havoc to Kansas City and the entire area across the center of the State to St. Louis and on down the Mississippi below St. Louis. The members of this committee who accompanied us on our recent trip into the flood area have seen the extent of the destruction. They know that when we speak of 2 million acres flooded, over 500,000 persons displaced, damages of a billion dollars, mile upon mile of transportation and communication systems disrupted, livestock destroyed, crops ready for harvesting ruined, industrial areas swamped—none of these phrases which have been used over and over again in describing the results of this flood can begin to give a true picture of the utter devastation and waste and human misery which we found and the heart-breaking and back-breaking job of rehabilitation.

There is, I believe, unanimous agreement that it is the responsibility of the Congress to see to it, insofar as is humanly possible, that a tragedy of this sort does not occur again. I do not propose today to enter into any discussion of the merits of the various controversial plans put forth to solve the water problem in the Missouri Valley. The proponents of each of the various plans are convinced that their particular plan is the best and only possible solution. Competent engineers, economists, reclamationists, agronomists, and interested citizens have offered suggestions, but their views, of necessity, arise from their professional or economic or sectional loyalties. For my own part, I do not profess to be a flood-control expert. I've been reading and studying for many months in order to inform myself to the best of my ability on the most effective way of meeting this problem. I have publicly stated on many occasions my belief that we must put an end to jurisdictional disputes and conflicting interests and work out once and for all an integrated, comprehensive, long-range program for controlling and utilizing the vast water resources of our Nation. Our national welfare and the security of our country are so closely tied to the harnessing of our water resources that we can no longer afford a piecemeal approach. The Missouri Valley is but one facet of the tremendous planning job which should be undertaken promptly.

Regardless of what over-all plan is ultimately achieved for the administration of water programs, I believe that there is substantial agreement at this point that certain basic construction now authorized or under way could have prevented to a very large extent the damage caused by the present flood. I talked a moment ago about the agricultural levees along the Missouri. I think it is important to recognize that the height of these levees is predicated on certain upstream reservoirs being in operation.

One of the most important of these is the Tuttle Creek Reservoir on the Big Blue River in Kansas which would afford early relief to the area along the Kansas and Missouri Rivers. This project has been authorized but has received only planning funds to date. The engineers, I understand, could effectively utilize $5 million in the first year for construction work on this reservoir and I earnestly hope that this committee will see fit to approve these funds so that construction can be initiated on this project.

Five other upstream reservoirs are already under construction and work should be expedited on all of them. Harlan County Reservoir in Nebraska is almost complete. The $3,344,000 requested for fiscal 1952 would bring this project to 99 percent of completion, and I understand that funds to be requested in the future will be for necessary reservoir management and final costs on relocation work. I hope this committee will approve the full budget request so the maximum benefits can be achieved from this project.

In addition, I hope the committee will recommend the full budget amount of $37,083,700 for Garrison Reservoir in North Dakota which is now 42 percent complete and $34,699,000 for Fort Randall Reservoir in South Dakota which is now 46 percent complete. Two other reservoirs important to this chain of holding reservoirs are Oahe in South Dakota and Gavins Point in Nebraska, both of which are barely started. In order to provide for an integrated and effective program, I believe that construction funds in the amount of $3,770,000 for Oahe and $5 million for Gavins Point should be approved at this time.

In addition to the holding reservoirs the levee units downstream from Kansas City are urgently needed and some of them should be started at an early date. This is particularly true in the Portage des Sioux area near the confluence of the Missouri and Mississippi where about 30,000 acres of rich land is subject to

flooding by both rivers. This area also contains numerous communities and important transcontinental railroads and highways. For the protection of this entire area I would like to see this levee unit (15–L) completed at an early date.

While the completion of the upstream reservoirs will reduce flood heights to insure a higher degree of protection to the leveed areas and permit better utilization of the unleveed areas, I believe, also, that all of these flood control measures should be supplemented by soil-conservation measures. I can see no conflict between flood control and soil conservation but rather I view them as a team working together. Topsoil, of course, is one of the basic resources of our Nation and when it is removed the productive value of the land is imperiled. In other words, the two programs complement each other. Soil conservation is necessary to retain the topsoil and the moisture on the land and to keep sediment out of the stream channels and reservoirs. On the other hand, the authorized levees and reservoirs are needed to protect the bottom areas from overflow from the runoff of heavy rainfall in the hilly regions of most of Missouri where the rainfall exceeds the retention capacity of the soil.

Kansas Citys—Missouri and Kansas

This project consists of 13 units of levees, flood walls, pumping plants, bridge raises, channels, and other works at the confluence of the Kansas and Missouri Rivers. The project would afford protection to extensive commercial, industrial, residential developments in the flood plains, including two airports, seven major transcontinental railways, three electric power plants, water supply facilities, stockyards, packing plants, oil refineries, grain mills, and expanded defense industry. We have seen the overwhelming damage to this area in this present flood. The Kansas City project together with the upstream reservoirs are urgently needed in an effort to prevent this sort of thing from happening in the future. The project is now about 73 percent complete and the $4,500,000 requested for fiscal 1952 would bring it to 84 percent of completion. The House has approved this full amount and I hope that this committee will do likewise.

Canton, Mo.

In May of this year, 2 months before the flood waters started rampaging down the Missouri, the community of Canton in northeastern Missouri experienced another major flood. Canton is a small community of some 2,500 inhabitants. It is a trade center for several counties in the area and contains a number of small industrial plants, grain storage facilities, and a liberal arts college. Because Canton is such a small community, the damage wrought here did not receive the immense amount of publicity that was given to the more extensive flood on the Missouri. Nevertheless, I heard from practically every citizen of Canton, and I have here some photographs, which I would like to show to the members of this committee, depicting what happened in that community.

This is hardly a new experience for residents of Canton. Major floods have occurred in 1929, 1937, 1938, 1939, 1944, 1945, 1947, and 1951. Within the city limits these floods overflow the entire commercial and business area, as well as the major portion of the residential area. Damage this year is probably close to a quarter of a million dollars. There is no question that the growth of this community is curtailed as long as it is subject to flood as it is at the present time.

In the Eighty-first Congress a flood-control project for Canton was authorized. The estimated Federal cost at that time was $1,086,500. Due to rising prices, the cost has increased to $1,338,000 at the present time. The project is authorized subject to the provision that local interests would furnish necessary rights-of-way, contribute toward the cost of modifying existing structures, and maintain and operate the completed works. The cost to local interests is estimated at $73,600. The project in addition to protecting the commercial and residential sections of the town would protect against traffic interruption to the main line of the Rock Island Railroad and on United States Highway 61, a transcontinental highway.

Some residents are of the opinion that flood heights at Canton have been increased by construction and operation of lock No. 20 on the Mississippi River immediately above the town. If such is the case, the Government is under a moral obligation to alleviate the situation. There is little doubt that the agricultural levees on the Illinois side of the river opposite Canton tend to increase flood heights in that area. The Army engineers have recommended that these levees be raised to provide that rich farming area with a higher degree of protection. That work has not been authorized but the project at Canton should be completed in advance of raising those levees.

Since the sum of $1,338,000 would provide for the initiation and completion of this project within 1 year, I hope that the members of this committee will give earnest consideration to including this item in the appropriation bill, in order to eliminate the serious flood conditions that have confronted this small community year after year and permit the residents to live and work in security.

I would like to have included in the record of the hearings a letter I received from the board of education of Canton and a survey of the 1951 flood damages conducted by the Canton Chamber of Commerce.

Additional flood-control funds

Although I appeared briefly before this committee several days ago in connection with planning funds for Cape Girardeau, I would like to stress again the urgent need for planning funds prior to the construction of levees in that locality. The members of this committee that were with us on our recent trip to that flood area saw at first hand the damage that was done there and the magnificent spirit of the people of that community in the face of such destruction. $75,000 is needed for planning and I hope that this committee will approve it promptly.

I am also requesting planning funds in the amount of $325,000 for Pomme de Terre and $1 million in further construction funds for the Perry County levee district. I would also like to see prompt approval of the $15 million requested for emergency repairs and bank stabilization needed as a result of the present flood. In this connection I would like to point out that although the present flood area should have priority as far as these funds are concerned they would nevertheless be available for use anywhere in the United States.

PART II. RIVERS AND HARBORS

Mississippi River between the Ohio and the Missouri

The contribution of the Mississippi River navigation system to the winning of World War II and our present defense effort cannot be overlooked. Every effort should be made to keep this vital waterway in operation and ready to perform its part in the present emergency. This project which provides for maintaining a channel 9 feet by 300 feet for 195 miles is at present 76 percent complete. This section is an important link in the waterway from the Great Lakes to the Gulf of Mexico, and contributes substantially to defense installations as well as to commercial and industrial developments at St. Louis and East St. Louis. The House approved $5 million which I understand will bring the project to better than 95 percent of completion and I hope that this committee will do so also.

Mississippi River between Missouri River and Minneapolis

This project provides for the canalization of the Mississippi River to provide a navigable channel by the construction of 26 locks and dams together with various small-boat harbors. It provides water transportation for producers and consumers in the area and connects with the balance of the Mississippi River, the Illinois River and the Missouri River inland waterways systems. In 1949, this waterway carried 1,854,000,000 ton-miles. The House included $90,000 for improvements and I feel that a similar amount should be approved by the Senate.

Missouri River, Kansas City, Mo., to Sioux City, Iowa

This project consists of providing a navigable channel on the Missouri River of 9-foot depth and 300-foot width for a distance of 376 miles from Kansas City to Sioux City. The project is now about 60 percent complete. This project was, in fact, practically completed in 1943 when construction work was cut off and maintenance curtailed during the war period. As a result of this fact, together with extremely high waters, the work which had already been completed suffered extensive loss and damage. Additional funds at this time will assure adequate control over the structures and their loss will be minimized. This project is an essential unit in the comprehensive plan for the Missouri River Basin and is necessary to meet the requirements of navigation and provide stabilization of the river banks. This stabilization will protect close to 1,800,000 rich agricultural acres from erosion and would also afford protection to municipalities, industries, and other installations having a value of around $2,000,000,000. The House included $4 million and I hope that this amount will be retained in the Senate bill.

Missouri River, Kansas City to mouth

This project is an extension of the project above Kansas City. It is now about 80 percent complete. This project, too, was nearly completed when World War II

came along and the project suffered loss and curtailment in construction and maintenance. Before the war, there was considerable traffic on the river, largely in wheat and oil. During World War II, most of the barges and towboats were required on the Mississippi for national defense. Tonnage on the Missouri River, however, has increased again since the war and communities such as St. Joseph, Leavenworth, Lexington, Boonville, and Jefferson City have constructed or planned additional terminal facilities. It is estimated that the project will also prevent loss of 9,000 acres of land annually from erosion and will create about 188,000 acres of accretion land. The total benefits resulting from this project since its inception are about $175 million. The House approved an amount of $2,300,000 and I hope that that sum is retained by the Senate.

PART III. PLANNING AND SURVEYS

Planning

It is noted that the House eliminated all funds for planning from the bill. I think that is a mistake, and that planning should continue on all projects essential for defense purposes or that fit into the program for civilian economy. This would permit prompt initiation of construction if the emergency demands or at the end of the present emergency. This is particularly true of the projects involving hydroelectric power. An example of that is Table Rock Reservoir on White River in Missouri. This reservoir would be located upstream from the Bull Shoals Reservoir. In addition to the 84,000 kilowatts of installed capacity and the power that would be produced, the regulated flow would increase the energy output at the Ozark Beach private plant and Bull Shoals, and permit the addition of at least 80,000 kilowatts power installation at the latter project. It would also provide needed flood control, and due to its location in the scenic rugged Ozark Mountains, would become an important recreational center. The estimated annual benefits would average in excess of $3,000,000.

It is further noted that the funds included in the House bill would complete 6 projects, 9 other projects would be essentially completed, and construction would be advanced to such a stage on 23 additional projects that they would be essentially completed in one more year. If our program for orderly development of the water resources of the Nation is to continue, new projects should be ready for initiation to replace others as they are completed. I would like to request that the committee restore the budget estimate for planning funds, including $100,000 for the Table Rock Reservoir.

Surveys

The House also eliminated all funds from the bill for preliminary examination and surveys. These are the initial studies or review of projects and are authorized by Congress in flood control or river and harbor acts, or by review resolutions of the legislative committees. These studies are of great value in assembling hydrological and economic data, keeping abreast of the flood conditions in most sections of the country, and colledting information on flood damages as they occur. In connection with these surveys, the engineers consult with local interests and furnish them advice on their flood problems. The residents rely on the information furnished in making future plans for improvements, and perfect levee and drainage district organizations to cooperate with the Government in matters regarding flood-control and navigation facilities.

This program is well under way and has provided valuable information on projects for future development at the proper time. I think it would be a mistake to stop this program completely and break up the existing organization. In our State a comprehensive study of the Arkansas-White-Red River watershed is being made by six Federal agencies, chairmaned by the Corps of Engineers. The House has approved funds for surveys by the Departments of Interior and Agriculture, and other agencies, but in denying such funds for the Corps of Engineers, prosecution of the study would, of necessity, be suspended. I recommend that the entire budget amounts for examinations and surveys be restored to the bill.

PART IV. FERRY LANDINGS

Mr. Chairman, there is another matter I would like to bring to the attention of the committee. Along the Mississippi River the bridge crossings are rather widely separated. At certain strategic points in between the bridges there have been located private ferry crossings for convenience of the residents of both Missouri and Illinois and all other traffic in getting their crops to market, interchange of commerce, and to obviate the necessity of a long round-trip journey to the nearest bridge to get across the river.

Most of these ferries have been operating for many years. Some of them now cross the pools formed by the navigation locks and dams. There are two such ferry locations in northwest Missouri where the ferry landings and docks have silted and shoaled to such an extent that the ferries have difficulty continuing operations. The Golden Eagle Ferry crosses the Mississippi River about mile 228 within the pool of the Alton lock and dam. The river at this point is wider now than before construction of the dam, and the ferry landing where silting takes place would be normally dry land. The ferry connects various State highways of Illinois and Missouri with United States Highways Nos. 40 and 61 and with No. 67 in Illinois. The nearest bridge is at Alton 28 miles downstream.

The West Point Ferry landing is located near mile 241 immediately below lock and dam No. 25. This ferry permits interconnection between several Missouri and Illinois Federal primary and secondary highways with United States Highways 61 and 67. The situation here is different from the Golden Eagle Ferry in that the operation of lock and dam No. 25 causes extensive sedimentation at the ferry dock. The nearest bridge across the Mississippi River is at Alton, Ill., about 50 miles downstream.

In addition to the passenger cars and local farm and produce trucks that use these ferries, there are many common carriers with public-service commission and Interstate Commerce Commission certificates of convenience and necessity using them. If the landings are not kept clear, the ferries will be forced to discontinue operation. In that case, the traveling public would be injured to the extent that interstate commerce over these Federal-aid and State highways and the local residents would be forced to travel long distances to get across the river, farmers would have to find new markets for their products, and much inconvenience would be caused. The ferry operators are not able to stand that expense at this time.

Public Law 362, Sixty-seventh Congress states as follows:

"SEC. 2. That the Secretary of War is hereby authorized and directed to modify the plans for the existing works of river and harbor improvements hereinafter set forth and to prosecute the improvement of said projects in the manner herein directed, or as recommended by the Chief of Engineers. * * *

"Mississippi River from the mouth of the Missouri River to Minneapolis, Minnesota: Appropriations or allotments heretofore or hereafter made for general improvement or maintenance shall hereafter be available for the dredging of channels to landing places, whether on the main river or subsidiary sloughs or former channels: *Provided*, That satisfactory evidence is submitted by the localities concerned that such channels will be used by commerce to an extent commensurate with the cost, and that other landing places are not economically available to serve the same localities: *Provided further*, That preference shall be given to localities that give satisfactory assurances that they will maintain said channels: *And provided further*, That not more than $50,000 shall be expended for dredging of channels to any one harbor in any one fiscal year. * * *"

The interpretation placed on this law by the Corps of Engineers is that it applies to landing places which will be used in the interest of commerce or general navigation, and could not be applied where benefits would be accrued by an individual ferry company.

I do not agree with that interpretation. The dredging of the ferry landings is as much in the interest of commerce as dredging the channel. Frequently channels are provided for the use of a favored few, or for the use by one company, firm, or installation. The flood-control policy is that "the benefits to whomsoever they may accrue are in excess of the estimated costs." The matter of who owns the towboats, the ferries, or the trucks which cross the ferries is of no concern. The ferries are common carriers available for public use and licensed by the local agencies. Many of the trucks that use them are common carriers. The charges by the ferries are not exhorbitant and are under regulation. They operate for the benefit of the public and save much time and extra travel.

The civil-functions bill as passed by the House contains an item of $674,700 for maintenance of the Mississippi River between the Missouri River and Minneapolis, Minn. I believe that a small amount of that item should be allocated for dredging at these ferry docks. The ferry companies could not find the private equipment to do this work, while the Government dredges could stop by and do the work while performing their normal maintenance functions. An estimate of $20,000 would adequately care for these two localities.

I do not believe a special item in the bill would be necessary, nor do I believe that a survey of the localities is necessary because of the time element involved, and because the existing law seems to be adequate to cover the matter. If the

committee deems it advisable, a statement of clarification in their report on the bill should be all that is necessary to permit carrying out the desired work.

Chairman McKellar. All right, Senator McClellan.

Senator McClellan. Mr. Chairman, this problem has come up since these hearings started, and I should like for the engineers to tell us about the Ouachita River locks problem in Arkansas.

As I understand it, now, there is how much in the budget for the operation of those locks this year?

General Chorpening. I will ask Colonel Milne.

PLANNING FUNDS, LIBBY DAM PROJECT, OREGON

Senator Cordon. Senator, before you proceed, will you let me file some material for the record?

I have a letter from one, Mr. James P. Rogers, of Portland, Oreg., requesting me to ask permission to put in the record his statement on behalf of J. Neils Lumber Co. of Libby, Mont., having to do with the planning of the Libby project in that State.

The statement has a couple of attachments to which reference is made.

I ask that the statement and the attachments appear in the record, together with two paragraphs in a letter which I have indicated.

Chairman McKellar. Without objection, it is so ordered.

(The material referred to is as follows:)

Hart, Spencer, McCulloch, Rockwood and Davies,
Portland 4, Oreg., July 17, 1951.

Re Libby Dam item, civil functions appropriation bill (H. R. 4386).

Hon. Guy Cordon,
United States Senator, Senate Office Building, Washington, D. C.

Dear Senator Cordon: My name is James P. Rogers. My address is 1410 Yeon Building, Portland 4, Oreg. I am appearing on behalf of J. Neils Lumber Co., which has operations at Libby, Mont. That company is an old and well-established manufacturer of lumber and lumber products, having at Libby a sawmill, planing mill, Presto-log plant and pressure treating pole manufacturing plant. At these operations and in the logging operations which supply them, the company employs approximately 700 men with an annual payroll of something in excess of $3,000,000. In the degree of its utilization of forest products, its enlightened cutting and forest-protection practices, and its lack of waste both in the woods and manufacturing, it stands among the highest of all forest-products manufacturers in the United States.

Presently the company's Libby operations are backed by approximately 1 billion feet of its own timber. This, in connection with such timber as it acquires by competitive bidding from the approximately 6 billion feet of Forest Service timber in the "Kootenai working circle" has resulted in a permanent operation on a sustained-yield basis, assuring not only permanence of manufacture and employment in the area but a steady increase in timber volumes of both Federal and private lands by the practice of enlightened forestry in cooperation with the United States Forest Service.

Very truly yours,

James P. Rogers.

Statement of James P. Rogers, in Behalf of J. Neils Lumber Co., Libby, Mont.

Mr. Chairman, Senators of the subcommittee, I am indeed grateful for this opportunity to appear before you on one item of the proposed civil functions appropriation bill, that of the request for planning funds for the Libby Dam project in the amount of $200,000. That item was, as this committee knows, disallowed by the House committee; H. R. 4386 was passed without inclusion of any funds for the planning stage of that project during fiscal 1952.

I would be a little apologetic for taking the time of busy Senators, even so little as this, on a $200,000 item in a proposed $600-million-plus budget, were it not that it is the initial appropriation which causes the most trouble and takes the most time in a major construction project. Frequently, I gather, considerably more time and thought is given to a half-million appropriation at the start of a project than to 20 million later.

So even were the Libby Dam a normal project, the committee would be at some pains to consider it carefully at this time. But this is a long ways from the standard type of project—if there is such a thing—which is a part of our river-basin-development programs.

For heretofore, in the development of the Columbia River Basin, projects have been constructed in or planned for arid or semiarid locations in which their adverse effects were negligible or nonexistent. But what sets this project off from all others—even Hungry Horse, also in Montana—is the fact that it is situated right in the middle of completely different economy than that it is supposed to benefit. Thus the Libby project is utterly unlike Bonneville, McNary, The Dalles, or even Albeni Falls. This involves the "up-river," or tributary watershed region which is in the western reaches and magnificent pine forests of the Rocky Mountain chain, not the Columbia at all.

Thus the Libby Dam represents a completely new phase of basin development: That of infringing on a wholly timber economy for the benefit of a far down-river, industrial economy. And unless in connection with this project the Congress is very careful indeed, it can here create a precedent which, like Banquo's ghost, will rise to haunt the development of our natural resources for many an evil night—and day. I would not have you make this first appropriation, if I can help it without at least offering you the skeleton of facts upon which you should put correct flesh and muscle.

Bluntly put, I think it is demonstrable that you should either increase the fiscal 1952 planning funds for this project from the $200,000 approved by the Bureau of the Budget, to $500,000, or you should cut it out altogether. As it now is, you will have thrown the $200,000 down the well if you approve that amount; you will have formed the basis for saying that planning funds were appropriated—and spent—but without having received, on the Nation's behalf, any good from them. The situation would be not unlike the approval by the WPB during the late war, of 40 feet of rubber belting when the fixed machines that needed belt were 25 feet apart.

Nor is this any attack, directly or indirectly, on the Corps of Engineers. Though the facts are not available to me I would suspect that they, knowing the immensity of the job before them here, asked for a good deal more than the $200,000 approved by the Bureau of the Budget for the planning of this project. Nor could the Corps have been, in its wisdom, under illusions that any amount of money could cure some deficiencies in basic legislation which must be cured before a project of this type can be fitted into the whole national economy.

Let me, then, state some basic facts which give rise to these intentionally provocative statements.

This project, in addition to its immense problems, is in itself immense. Though its cost has been officially estimated as lower, I will gamble with you that before you have finished you will have appropriated close to $400,000,000 of the taxpayers' money. In addition to the vastness of the structure itself, which will create a reservoir or lake 98 miles long—56 miles in the United States and 42 miles in the Dominion of Canada—you will have paid about $100,000,000 for the rerouting of 120 miles of the main line of the Great Northern Railway through northwest Montana. You will have paid for rerouting of some few miles of a branch line of the Canadian Pacific Railway. You will have inundated about 45,700 acres of land in the United States, including 35,500 acres of commercial timberland containing about 105,000,000 feet of merchantable timber and young growth. You will have paid for the flooding of numerous farms in the United States and Canada, or the alternative resettling of those who wish to retain their roots in the soil, albeit elsewhere than their homes from which they will be driven. And you will have either paid for directly, or relocated, small towns which will have been inundated by the reservoir.

There is another large cost you can avoid, however, but only with the greatest of care. It can be seen in lessened revenue the Nation will suffer, and taxes and payrolls which would have come but for the project. For as the whole human cost of war is not alone in its casualty lists but in its children who would have been born but were not because those casualties were potential fathers, so a project in an area like this can count as part of its cost economic opportunities that were there,

ready to be realized, but were not because of the project's impact which pinched off those developments before they could see the light of day.

Even in direct loss the injury to Uncle Sam's treasury from diminished timber values could be immense, if careful plans are not laid. Without those plans some 2 billion feet of the finest softwood sawtimber left in North America could be almost as hermetically sealed off from normal development as if it were suddenly transported to the moon. And of the remaining (now) 3,800,000,000 feet, the value to the United States could be reduced by at least $4 per thousand, or $15,200,000. Placing the total timber lost by lack of economically feasible transportation means at $5 per thousand, a very conservative valuation indeed, the lack of ample consideration in the project for the timber economy of the region could easily mean the direct loss of $25,000,000 in receipts, over a long-time period, to the United States, in addition to the loss of future development. And this figure can go only one way—up—for it is based on present timber volumes which but for the forest resource interference this project might mean, can be expected to increase 25 percent in the project's amortization period of 50 years.

The truth is, of course, that a mistake of omission has already occurred with respect to this project. All of the factors here mentioned were apparent to anyone familiar with it when H. R. 5472 became Public Law 516 in the second session of the Eighty-first Congress, on May 17 of last year. Ample attention has been directed to these considerations: On four formal occasions I myself have made statements and filed memorandums or briefs calling attention to the serious inadequacies of present legislation to solve the new problems of coordination of natural resource development this project raises. These were: (1) At a hearing held by the Corps of Engineers at Libby, Mont., on July 7, 1948; (2) at a hearing held by the corps on the Columbia River Basin section of the "308 Report" at Portland, Oreg., on February 2, 1949; (3) at a hearing before the President's Water Resources Policy Commission at Spokane, Wash., on June 16–17, 1950; and (4) at a hearing before the International Joint Commission at Helena, Mont., on March 19, 1951.

In addition, and of more importance than my statements, Mr. P. D. Hanson, regional forester of the Forest Service's Region I, which protects or manages some 33 million acres of this vast timber domain in the West, has written a brochure on the subject entitled "Forests, Dams, and People" which I should like to furnish the committee for its examination and files. This analysis of the problem has had very widespread circulation and much favorable comment.

And the State of Montana has spoken to the Congress also, calling attention to the needs of the region, should this project be built. In its session this year (the thirty-second) the Montana Legislature memorialized the Congress on the subject of the Libby Dam project and the disruption it would create in the economy of the State. I should like to insert a certified copy of this joint memorial, at this juncture, into your record, not just as a formality but urging you earnestly to remember that here, and in the Governor's speech I shall refer to in a moment, is the people of Montana speaking through their highest elected officials. And I could go on at length furnishing for the record other statements, from private as well as public sources, to demonstrate that virtually everyone familiar with this project, or affected by it, has recognized the need for some basic remedial legislation before it gets into the planning stage. And I should say most of us hoped and expected that it would be found in the 1950 River and Harbor Act.

The nature of this addition was—or should have been—that coordination of plans for the project with the development of the natural resources of the area should be required by law rather than left to the discretion of the construction agency. Senators will recall that the lack of such a provision in the act was pointed out by the President in his special message describing what he deemed its flaws despite his reluctant approval. He said at that time, in commenting on the inadequacies of the bill in coordinating the activities of the Corps of Engineers with other agencies in projects for the Arkansas, White, and Red River basins: "Some of the work to be done under such plans will be carried out by the Department of the Army, but other equally important phases * * * will be carried out by the Department of Agriculture, the Department of the Interior, and other Federal agencies. Under these circumstances, it is clearly inappropriate that those other agencies should not participate in making the plans in the first place."

But even such inadequate requirements were left out of the portion of the act relating to projects for the Columbia River development, the President noted in his message as another and more serious defect.

These same deficiencies were again called to the attention of the whole Congress in the House Appropriations Committee report on the bill now before you. That committee said (Rept. No. 544, p. 2): "* * * the committee suggests that the Corps of Engineers make an economic reevaluation from a national standpoint *of all projects presently in the planning stage* with a view to effecting greater economies and a better integrated national program * * *. While some coordinating with other interested agencies has from time to time been done, the committee believes that a study of the proper approach to the development of our natural resources, *completely coordinated with other agencies of the Government*, might well be considered." [Italics supplied.]

In short, I am confident I am ably supported in the belief that we are as yet unready for appropriation of planning funds for this project because of inadequacies in existing law. And I am very sure indeed that planning funds in the amount approved by the Bureau of the Budget for this project are insufficient to allow an adequate job to be done in view of those deficiencies. If existing statutes were adequate, a $200,000 appropriation to the Corps might well be enough, since the Forest Service, for example, might then properly ask an appropriation to carry out the duties thrust upon it by the project. But it is certain that this sum is wholly inadequate to allow the Corps of Engineers to do their own planning and—again for illustration—that of the Forest Service too.

Let me state a few of the considerations involved, for example:

In the area affected, i. e., the major portion of Lincoln County, Mont., the United States owns about 1,207,000 acres of timberlands, managed by the Forest Service. The bulk of this vast Federal acreage, or about 700,000 acres, on which stands approximately 3,222,000,000 feet of timber of all ages and species, lies north of the bend of the Kootenai where the dam will be located and will thus be directly involved in the transportation problems the dam will create.

Down the valley of the Kootenai, the route this timber must take to the forest products manufacturing plants at Libby, Mont., the present roads to the dam site are sketchy in the extreme. There is a narrow, unimproved road of sorts down the west side of the valley, but on the east side there is no through road at all; only the spurs coming out of canyons and running to log landings. There is not now, and never has been, a suitable road to transport logs by truck to Libby from Rexford, for example, which is some 55 miles north of Libby.

The reason why is obvious. Running down the Kootenai Valley from Rexford south to Libby, and thus serving as the main artery of log transportation for this large body of Federal timber, is the main line of the Great Northern Railway. As long as that railway ran through the area the only necessity in road-building was to bring the logs down the numerous valley feeding streams into the Kootenai, to landings where they could be loaded aboard railway cars for Libby.

The Libby Dam, if constructed, will not only require the relocation of the railroad many miles away from that valley, but will also include in its reservoir area, of course, the main valley and the tributary stream valleys feeding into it. Thus it will flood out all the downhill or water grades so necessary for efficient transportation of logs. When the reservoir is in the railroad will be gone, and so will the only economically practical routes for the transport of the Federal timber. What will be left will be only mountainsides: to build roads above the reservoir area will require much greater mileage, grade, and curvature than building them down the valley. Even the most desirable transportation medium, i.e., a high-speed, all-weather Forest Service road down each side of the reservoir as a substitute, will involve a substantial additional cost for bringing logs from the Rexford area because of these factors.

Nor will transport of logs in the water of the reservoir be an available substitute, except at still greater cost and less efficiency. The larch which comes from these forests is characterized as a "sinker"; the pine will float. But since there is much more larch than pine it would be a practical impossibility to build up rafts; only by great barges could logs be transferred over these distances by water. And even then, with a maximum water elevation variation of 100 feet for this project the facilities necessary for handling at such varying heights, plus requisite storage, would involve a cost likely exceeding the construction cost of adequate roads down each side of the reservoir area.

The primary points here, then, are two: (1) It is completely silly to speak of "replacement in kind" where the Great Northern main line railroad from the area is the thing that would, but cannot, be replaced. Yet that is all the present law provides for. (2) There is no other place for the greatly increased costs of transportation to come from than out of the timber itself, which means out of Uncle Sam's pocket. In diminished Forest Service revenues this project could

well add another $25,000,000 as a minimum to its cost, as I have previously suggested.

It should not be imagined that all of this Federal timber would simply be diminished an average of, for example, $4, $5, $6, or $10 per M feet, and all be salable at this reduced price. Some of it is of high quality and easy to log and thus would be, but other of it is of relatively low quality and could not bear that decrease in value. Hence much of the timber now salable, under present transportation costs, would be lost forever because of the sheer impact of forest economics.

Much of this timber also is overmature and should be cut before further deterioration robs it of all value. Another $6 per M feet on its cost, for example, would render it useless also.

How much in each case? No one can say now. That is the province of the Forest Service. I know the Corps of Engineers would be the last to contend that it was theirs. And in this connection I am told that the Forest Service has estimated it should have $106,390 in appropriations for fiscal 1952 to plan how best to minimize to the greatest possible extent the effects of this project on the timber economy of northwest Montana; if, in addition, it is to handle the presale work on non-Federal timber in the flowage area, its opinion is that its fiscal 1952 additional appropriation should be $141,390, and for fiscal 1953, $79,520, or a total of $220,910. This is, of course, simply the Forest Service's rather hurried estimate, as I understand it, of the preliminary or "pre-blueprint" planning for the use and protection of the forest resources in the area, and does not include its estimate of the amount required to be expended for replaced and new facilities to provide the adequate service to the area. That, I am told, runs to an additional $10 million at a minimum.

Of course, until the Forest Service has been provided with the funds first above mentioned to do their preliminary planning and survey work, it is impossible to tell whether that agency is correct in the last estimate. However, these figures demonstrate that the problems involved in coordinating the construction for which the Corps of Engineers is responsible, with the forest resources and their management for which the Forest Service is responsible, are immense and not to be shrugged aside lightly if 50 years of Federal forest conservation policy is not to be scrapped.

One of the tragedies here is, of course, that as of now these items, as directly attributable to the Libby Dam as any part of its construction funds, must come before a different subcommittee of this Appropriations Committee. It is my earnest hope that this subcommittee can and will hear, formally or informally, the views of Forest Service representatives on this project and the duties it imposes on them.

It may well be that these precise considerations were in the mind of General Walsh, division engineer of the Corps of Engineers, when he expressed to us in writing the view that if construction of this project was imminent the planning appropriation should be $500,000. At this point I should like to insert in the record a letter from this witness to General Walsh, and his reply, both of which are self-explanatory.

Briefly, when it became known that the Bureau of the Budget had approved only $200,000 for Libby planning funds, we who were familiar with the effect that project would have on the economy of the region were greatly disturbed at the obvious inadequacy of the funds requested. It was that concern which prompted my letter to the general. His views speak for themselves but certainly support our reason for that concern.

The perplexing problems involved in the placing of a project of this magnitude in an area in which it can disrupt one economy for the benefit of another, have not gone unremarked by Montana's people. As Senators probably know, there is pending before the House and Senate respectively H. R. 1626 and S. 989, the so-called Murray-Mansfield bills, which would require the coordination of the various Federal agencies involved in a project of this nature. The bad experience of Hungry Horse and the authorization of the Libby Dam project without correcting provisions in the Act are the impelling motives of this legislation, of course.

And on May 24 of this year the Governor of Montana, Hon. John W. Bonner, addressed a joint meeting of the Columbia and Missouri Inter-Agency Basin Committees at Bozeman, Mont., on this subject. Rather than lengthen the record with the whole of his excellent speech, I will read only one paragraph of it, which is the climax of his discussion on the point to which I am addressing myself here. There the Governor said:

"The present dam construction policy of replacing facilities in kind does not give the timber, minerals, and other resources above the dams an even break. Unless something is done, many of the structures now contemplated are going to complicate the transportation problems to the point where timber values will be seriously depreciated. If necessary, legislation should be enacted that will authorize the constructing agencies to develop transportation facilities to a standard that will permit harvesting the resources upstream from the dams. If the cost benefit ratio of the dam itself cannot absorb such costs, the investment should be made anyway and the costs written off as nonreimbursable items."

Without extending myself but little I could occupy hours of time before this committee in discussing the various problems attached to the dam and its construction in this area of northwest Montana. My personal view is that it can be related to the present defense emergency only by the greatest stretching of the imagination; if this project, which is to produce electric power no earlier than 1958, is necessary for a defense emergency at that time, it will make little difference to us what drastic effects it will have. I take it our economy as we know it would by that time have disappeared in any event.

But assuming that this project is necessary for the normal development of the downstream Columbia River economy, every requirement of common sense and the public interest suggests that this vast timbered area so valuable to the Nation through what it can produce, both directly in the form of housing and other construction, and indirectly in the form of taxes and payrolls, be disrupted as little as possible, especially when the bulk of it is as much a part of the United States treasury as if it consisted of gold bullion. I feel certain that if a major construction project were planned for the area of Ft. Knox, some steps would be taken to see to it that the gold buried there would still remain accessible. The same should be true of the forest gold in northwest Montana.

I realize that this is an appropriations committee and that most of the considerations I have mentioned are legislative rather than appropriative. But I do not believe you are yet ready to appropriate for this project, because of the deficiencies in the present law which guarantees here disruption of a vast quantity of the Federal timber resources of the United States, even with the best efforts of the constructing agency, the Corps of Engineers. And their best efforts, inadequate though they may be by reason of the fact that these are forestry, and not construction engineering, problems, will not be allowed their full scope if you appropriate only the amount approved by the Bureau of the Budget.

In short, as I said in the beginning, I think it plainly demonstrable that you should either increase the appropriation to the half million dollars mentioned in General Walsh's letter, or you should cut it out entirely and await the day when basic Federal law will provide a base upon which the Army engineers and the other agencies involved can work out their mutual problems on a wholly equal basis.

Mr. Chairman, members of the committee, I am exceedingly grateful for having had this opportunity to appear before you on this matter.

MARCH 9, 1951.

Re Libby Dam project.

Brig. Gen. O. E. WALSH, United States Army,
Corps of Engineers, Pittock Block, Portland, Oreg.

SIR: The J. Neils Lumber Co. of Libby, Mont., and we, on its behalf as its attorneys, have been much concerned with the effect of the proposed Libby Dam project on the company's forest operations and the forest economy of northwest Montana. As you know the J. Neils Lumber Co. has extensive manufacturing facilities at Libby, ranging from the utilization of chips and shavings into Prestologs through the manufacture of lumber products and pressure-treated poles of larch and lodgepole pine. These manufacturing facilities are supplied from the company's own forests and from timber purchased from the United States Forest Service, both of which are harvested on a completely sustained yield basis, that is, that annual harvest and annual growth are kept equal.

Since the Libby Dam project on the Kootenai River will, when and if constructed, create a reservoir along the Kootenai and Fisher Valleys which will roughly bisect the timber area of the region and will submerge the natural rail and motor vehicle transportation routes (which in this mountainous terrain are necessarily located at the lowest elevations), you can understand our natural concern that the project be so planned and executed as to do the minimum of harm to the forest economy of northwest Montana. And this result can be ob-

tained only, it seems to us, if the Corps of Engineers is provided at the inception with the necessary funds to provide complete plans not only for the dam itself but for the relocation and replacement of the property and facilities injured, destroyed, or would otherwise be rendered inaccessible by the proposed project.

For example: Any forest area is worthless unless the forest products within it can be economically transported to a manufacturing facility to be made into products useful to man. In the area in question much of this transportation is dependent on the operation of the Great Northern Railway's main line.

Other adjuncts of that transportation are a limited mileage of public highways and a very considerable mileage of private logging roads. Since the Great Northern railway line and the public highways must of necessity be relocated, and a substantial proportion of the private logging roads also, it is entirely possible that a much more extensive private road system than is now in existence will be required in order to make up the transportation loss which might be attendant upon a substantial rerouting of the railway line and public highways. Moreover, where the replacement is in public highways over which logs must move from forest to mill, that substitute will necessarily involve a heavier-than-normal highway construction if logs are to be transported over such highways.

Also, private roads which now provide access to both the Neils Co. fee timber and into Forest Service timber now have a favorable grade down valleys which may, and probably will be, inundated, necessitating their replacement along the tops rather than the bottoms of the mour tains of the area. Since grade and curvature, as well as distance, is of vital importance in forest-products transportation, the location and construction of such roads will be a task requiring much study with representatives of the Forest Service and this company.

The foregoing are of course only some of the economic problems which will be added to your construction problems in the planning for the dam, and we know you are as familiar with and concerned by them as are we.

The public press has recently carried the news that the 1951–52 budget hearings on the civil functions portion of that budget, will commence shortly. In view of this circumstance and the problems described above, we should greatly appreciate your estimate of the cost of a proper job of planning of the Libby Dam project, having in mind not only the plans necessary to the engineering of the project itself but the laying out and construction of all necessary facilities to minimize the harmful effects of the project on the forest economy of the region.

We appreciate that this is now probably one of several coequal projects which have reached this stage, but the foregoing request is made in view of the possibility that circumstances may require the construction of this project at an earlier date than had been contemplated when the budget was prepared.

Very truly yours,

HART, SPENCER, MCCULLOCH, ROCKWOOD & DAVIES.

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DIVISION ENGINEER, NORTH PACIFIC DIVISION,
Portland, Oreg., March 16, 1951.

HART, SPENCER, MCCULLOCH, ROCKWOOD & DAVIES,
1410 Yeon Building, Portland, Oreg.

GENTLEMEN: Reference is made to your letter of March 9, 1951, relative to the Libby Dam project, in behalf of the J. Neils Lumber Co., in which you outline the forest-access and general transportation problems in connection with lumbering operations in the Kootenai River Basin and the need for careful study of these problems to prevent any harmful effects by construction of the Libby project on these operations and on the forest economy of that area. You also request information as to the estimated cost of accomplishing thorough planning of the Libby project including full consideration of these problems.

The Corps of Engineers has been aware of the forest-access problems in connection with construction of the Libby project and is prepared to do everything possible within the limits of existing legislation and funds available to provide facilities necessary for economical harvesting and safeguarding of the timber resources of the area. Preliminary contacts already have been made with the Forest Service regarding the magnitude and possible resolution of the problem, but detailed study and investigation of the matter must await appropriation of planning funds for the Libby project.

This office estimates that planning funds in the amount of approximately $500,000 will be required in fiscal year 1952, if construction on Libby Dam is to be initiated in the immediate future as a part of the defense power program.

While planning and detailed design of the entire project will cost considerably more than this amount, the $500,000 will be sufficient to permit thorough investigation of the project, including study of the forest-access problems, as well as design of certain features which should logically be placed under construction at an early date. Information presently available indicates that only $200,000 is included in the fiscal year 1952 budget request. With this limited amount of funds, planning of Libby project will be delayed, or possibly greatly abbreviated, should early initiation of construction be directed by Congress.

Your sincere interest in this matter is deeply appreciated. If I can be of any further service to you, please feel free to call on me.

Very truly yours,

O. E. WALSH,
Brigadier General, Corps of Engineers,
Division Engineer.

UNITED STATES OF AMERICA,
State of Montana, ss:

I, Sam W. Mitchell, secretary of state of the State of Montana, do hereby certify that the following is a true and correct copy of an act entitled "A joint memorial of the Senate and the House of Representatives of the State of Montana to the Congress of the United States and to the Honorable James E. Murray and Zales N. Ecton, United States Senators from Montana, and to the Honorable Mike Mansfield and Wesley A. D'Ewart, Representatives in Congress from Montana, requesting that the Congress of the United States, in providing funds for planning and construction of the Libby Dam and other similar Federal projects in Montana that may be approved, make provision for replacing tax-income losses and for payments in lieu of taxes to local and State governments for adequate roads to replace those destroyed, and for Federal participation in providing adequate school facilities, policing, and relief to unemployed during the period of planning and construction," enacted by the thirty-second session of the Legislative Assembly of the State of Montana, and approved by John W. Bonner, Governor of said State, on the 28th day of February, 1951.

In testimony whereof, I have hereunto set my hand and affixed the great seal of said State.

Done at the city of Helena, the capital of said State, this fifteenth day of March A. D. 1951.

[SEAL]

SAM W. MITCHELL, *Secretary of State.*
By BLESSARD L. WALKER, *Deputy.*

SENATE JOINT MEMORIAL NO. 6—A JOINT MEMORIAL OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA TO THE CONGRESS OF THE UNITED STATES AND TO THE HONORABLE JAMES E. MURRAY AND ZALES N. ECTON, UNITED STATES SENATORS FROM MONTANA, AND TO THE HONORABLE MIKE MANSFIELD AND WESLEY A. D'EWART, REPRESENTATIVES IN CONGRESS FROM MONTANA, REQUESTING THAT THE CONGRESS OF THE UNITED STATES, IN PROVIDING FUNDS FOR PLANNING AND CONSTRUCTION OF THE LIBBY DAM AND OTHER SIMILAR FEDERAL PROJECTS IN MONTANA THAT MAY BE APPROVED, MAKE PROVISION FOR REPLACING TAX INCOME LOSSES AND FOR PAYMENTS IN LIEU OF TAXES TO LOCAL AND STATE GOVERNMENTS FOR ADEQUATE ROADS TO REPLACE THOSE DESTROYED, AND FOR FEDERAL PARTICIPATION IN PROVIDING ADEQUATE SCHOOL FACILITIES, POLICING, AND RELIEF TO UNEMPLOYED DURING THE PERIOD OF PLANNING AND CONSTRUCTION

Whereas the President of the United States has requested Congress to appropriate $200,000 for planning the previously approved Libby Dam on the Kootenai River in Lincoln County, Mont., preliminary to appropriations for construction of this project of the Army Corps of Engineers; and

Whereas the citizens of Lincoln County neither requested nor generally desire that this dam be constructed, and will be faced with serious economic and social problems due to loss of taxable private property, the disruption of transportation systems, and increased school, policing, and relief costs; but will share little of the benefits of the project, which will largely be derived by downstream areas and the Nation at large; and

Whereas the pattern developed for public sharing of indirect and incident costs of this project may set a precedent for future similar projects in Montana: Now, therefore, be it

Resolved, That the Thirty-second Legislative Assembly of Montana of 1951 now in session, the senate and house of representatives concurring, do most earnestly request that the Congress of the United States, in providing appropriations for the planning and construction of the Libby Dam and other similar Federal projects in Montana in the future, provide that the United States Government or its agency entrusted with planning and construction shall:

1. Provide continuing adequate payments to replace tax-income losses to county and State governments resulting from the removal or decrease of property valuations on the tax rolls.

2. Provide continuing payments in lieu of taxes to county and State governments equal to the tax revenue that would have been derived from the same project under private ownership.

3. Require that highways and roads in the flowage area be replaced by new transportation facilities on the basis of services-in-kind rather than roads-in-kind; thus in most cases providing roads on each side of the reservoir to replace the services previously provided both sides of a valley by a single road in the valley floor.

4. Provide ample school facilities during the planning and construction period for children of Government personnel and construction workers not previously resident in the area.

5. Bear the additional cost occasioned by the project of policing temporary towns and adjacent areas during the construction period.

6. Share the cost of necessary relief provided for unemployed persons and their families during slack periods of construction and for excess workers attracted to the area; and be it further

Resolved, That copies of this memorial be transmitted by the secretary of the State of Montana to the Senate and House of Representatives of the Congress of the United States and to the Senators and Representatives in Congress from the State of Montana.

Approved February 28, 1951.

ORWELL DAM UNIT, RED RIVER VALLEY PROJECT

Senator YOUNG. Mr. Chairman, may I ask you this. Some time ago, I asked General Chorpening some questions regarding the Orwell Dam. May we be permitted to put that information I requested in the record?

Chairman MCKELLAR. Without objection, that may be done.

General CHORPENING. The Orwell Dam is a unit in the project for the Red River of the North. The budget requested was for $700,000, and none was allowed by the House.

In the information that we have given to this committee, on page 114, 115, and part of 116, we have asked for the restoration of those funds.

There is a continuing contract under way there, and like these others on which we have testified, if these funds are not provided, there will be some charges to close out that contract, and for work which will have been done there for which no benefit will be obtained.

Senator YOUNG. How much water will that reservoir hold back to help in the flood situation?

General CHORPENING. As I recall, the capacity of that is in the neighborhood of 20,000 acre-feet.

Senator YOUNG. Will that help very much?

General CHORPENING. That will help considerably in the Otter Tail River because up there it is flat country, and that amount of flood storage, will have real benefit on that tributary. We feel this project should proceed.

Senator YOUNG. Thank you.

Chairman MCKELLAR. I want to introduce for the record a statement from Senator Sparkman and Senator Hill.

(The statement referred to is as follows:)

STATEMENT OF SENATOR LISTER HILL AND SENATOR JOHN J. SPARKMAN

Mr. Chairman and gentlemen of the committee, this bill (H. R. 4386) making appropriations for fiscal year 1952 for the civil functions of the Department of the Army provides funds for rivers and harbors and for flood control. We realize that during these times we must economize where possible. We are in accord with the President's desire for deferring, curtailing, or slowing down such projects which do not directly contribute to defense or to civilian requirements essential to the changed international situation, wherever practical.

We appear before your committee to urge earnest consideration of continued appropriations for the projects authorized for Alabama, particularly the comprehensive river-basin developments from which vast benefits will extend to the entire Nation. Projects under construction should be continued, essential projects should be started, and planning on other projects should not be interrupted.

The full industrial and agricultural growth of Alabama is dependent on the sound and wise development of the streams of the State, the second largest system of navigable rivers in the United States. These projects are national in scope. They will contribute to the national defense, the economy of the State and region, and the strength and security of the Nation.

The TVA has made invaluable contributions to the industrial and agricultural progress of the region, and to the health and economic welfare of all the people of the Tennessee Valley. It has made possible expansion of the chemical, aluminum, and other essential industrial production such as atomic energy; and to Oak Ridge that developed the atomic bomb and other similar installations. We should proceed with the continued orderly development of our other water resources and basin plans as authorized by Congress, to obtain their maximum contribution to America's economic and military strength.

DEMOPOLIS LOCK AND DAM, WARRIOR RIVER SYSTEM

The Demopolis lock and dam is an important link in the Warrior River system, one of our major inland waterways, and will be a major step in modernization of this waterway. It will be a link in the Tennessee-Tombigbee waterway when that project is completed. This lock and dam will replace four existing obsolete structures built between 1903 and 1908, with a modern lock 110 feet wide and 600 feet long and a lift of 40 feet.

This lock will permit carriers using tows of modern towboats of 8 to 12 barges to pass through, eliminating multiple lockages now required, producing great savings in expense and travel time. Annual savings to shippers will exceed $1 million. This waterway serves the needs of both the producers and consumers of steel in the South and the Nation by permitting movement of iron ore from Brazil, Venezuela, and Sweden to the steel mills of Birmingham, and the steel and other products from Birmingham moving to the industries and in foreign trade through the port of Mobile. The tonnage handled on this waterway amounted to 2,190,000 tons in 1949, and considerably more in 1950. New producing oil fields are being developed in the area and an increase in the movement of oil products is expected.

The budget estimate for the Demopolis Lock and Dam was $4,500,000. Restoration to the full budget estimate is requested.

TENNESSEE-TOMBIGBEE WATERWAY

The Tennessee-Tombigbee waterway—vital link between the Gulf of Mexico and inland America—will extend from the confluence of the Warrior and Tombigbee Rivers at Demopolis, Ala., through western Alabama and eastern Mississippi 260 miles to the Tennessee River in Pickwick Lake near Corinth, Miss. It will join the Warrior system into navigation with the great waterways of the Tennessee, Ohio, and Mississippi Rivers and will tie Alabama and Mississippi by water to the major inland industrial cities of some 26 States, including St. Louis, Chicago, Kansas City, Cleveland, Cincinnati, Pittsburgh, and Louisville. Almost $1,000,000 has already been devoted to the preparation of preliminary plans. It is important that this planning be continued but plans have been sufficiently advanced that construction can be initiated during the next fiscal year. At least $3,000,000 should be appropriated for initiation of construction on the project. These funds should be applied toward construction of the Gainesville Lock and Dam and for relocations and land acquisitions.

Completion of this project will reduce navigation distances between Gulf ports and the Ohio River region and will provide a slack-water route for northbound traffic to that region and to the upper Mississippi River, and would be beneficial to the industrial and agricultural development of a large area along the route of the waterway. It will tie the entire inland United States to the Gulf of Mexico through the port of Mobile, and will be an important link in the national defense facilities of the country. Navigation will be faster and cheaper, as shipping will not have to negotiate the swift Mississippi River currents and the routes to Pittsburgh, Chicago, and St. Paul will be shorter. Time and fuel will be saved. The prospective commerce consists of about 6,000,000 tons of diversified commodities. The average annual benefits are estimated to be about $8,000,000.

We believe that this project has very important national defense aspects and that planning at least should be continued. There are many hydrological and meteorological studies to be made on this project, as well as economic studies on some of the engineering features, and these should be continued at this time. The Bureau of the Budget considered this project of sufficient importance from a national defense standpoint to approve an estimate of $100,000 for planning. The House eliminated that item. It should be restored in the national interest and it is requested that at least $3,000,000 for construction be provided.

ALABAMA-COOSA RIVERS

The Alabama-Coosa River Basin is one of the country's greatest reservoirs of rich natural resources. The authorized project provides for improvement of the river for navigation, flood control, development of hydroelectric power, and related purposes to further the development of the resources of the basin. The navigation project will open a 600-mile waterway from Mobile to Rome, Ga., and permit full utilization of a region of 23,000 square miles of area rich in water resources, minerals, soil, and timber. An abundance of power and lower cost transportation will make possible electrometallurgical and electrochemical industries and the commercial development of deposits of coal, iron, and bauxite, arsenic ores, tin, asbestos, lead, graphite, marble, Selma chalk for cement, silica, and other minerals.

It is generally recognized that the Howell Mill Shoals Dam is the key project in the Alabama-Coosa River development, and its construction should proceed at an early date. For several years funds have been appropriated for planning work on this project, and plans are sufficiently advanced that construction could be initiated immediately upon the availability of funds. Up to date cost estimates and detailed information on the most economical development of the stream, particularly with respect to increasing the development of hydroelectric power, are available.

The total power installation in the basin will probably exceed 500,000 kilowatts. The comprehensive plan for the utimate development of the water resources of the basin will be accomplished, step by step, over a period of years as funds are appropriated. Construction of the Howell Mill Shoals Dam as the first step in this development, should be initiated at once to permit an orderly continuation of the development with a realization of the benefits to be derived at an early date. The reservoir provided by this dam will be accessible to a large part of the population in central Alabama for public use. An interconnection with the TVA transmission system from this project will permit interchange of electric energy and be of great value to both systems. The Southeastern Power Administration is suitably organized to handle the distribution of power from the Howell Mill Shoals site. The total estimated benefits from the most economical development of a high dam at the site, with a power installation of 160,000 kilowatts, will exceed $5 million annually, and its economic feasibility is unquestioned.

The Allatoona Dam above Rome, Ga., has been completed and is in operation. The flow regulation provided by that project will increase the power output at the Howell Mill Shoals site, and the regulated flow provided by the two projects will further increase the firm power at existing hydroelectric plants on the river below the Howell Mill Shoals site.

Accelerated development of the potential industrial capacity of the Alabama-Coosa Basin was started in connection with the national defense program during World War II. This industrial capacity, available labor, hydroelectric power and the close proximity to the source of raw materials which the Nation so urgently needs must be fully utilized. The need for power in Alabama far exceeds any anticipated availability. This need is continually increasing at a rate much more rapid than before the war, especially in the Birmingham and south Alabama areas.

It is believed that this project fully meets the criteria set forth by the President in his letter to the executive agencies relating to the construction of Federal projects and the public works program in general. The Corps of Engineers requested a budget estimate of $2,650,000 for construction. The Budget Bureau only allowed $300,000 for planning, which was eliminated entirely by the House. We believe construction funds should be made available at once.

Mr. Chairman, we call particular attention to the flood-control value of this project. We are all aware of the terrible catastrophe that has so recently been suffered in the Middle West and the untold misery that has been visited upon the people of Kansas, Missouri, Oklahoma, and Illinois. We know of the suffering and loss of life. The loss of property has been enormous. The known destruction is already at a billion dollars. Our hearts go out to those unfortunate people in their great distress.

The newspapers are full of the accounts of the floods on the Missouri River, its tributaries and on other streams in the area. The air is filled with radio accounts of the disaster. The Halls of Congress have echoed with speeches expressing sympathy to the citizens of the region.

During a period when we are in a state of national emergency the ravages of this flood have completely disrupted business, commerce, and transportation and vital defense production in this important section of the Nation. Crops in one of our richest valleys have been completely destroyed. Thousands of rural and urban families have been driven from their homes by floodwaters that inundated whole towns and cities. Levees and other flood-control structures were damaged or washed away by the raging waters. Our defense effort has been dealt a severe blow.

A few days ago the Senate approved without a dissenting vote an emergency appropriation of $25,000,000 to aid in relieving the suffering in the area and to assist in restoring essential community services and facilities. The Army engineers have other funds that are to be used for making emergency repairs to existing levees. We call attention to the fact that all these funds are for relief and making repairs and all will be thus consumed. They will affect no permanent solution of the problem. The threat of another disaster will still hang over the people of the area.

Members of this committee will remember that in 1938—13 years ago—Congress authorized construction of the Tuttle Creek Reservoir on Big Blue River, a tributary of the Kansas River above Kansas City. We voted for the authorization. We have always voted for the authorization of feasible flood-control works. Whatever the reason, we know that funds were never voted to carry out the Tuttle Creek authorization. General Pick told the committee that the Tuttle Creek Reservoir would have eliminated major flooding in the Kansas River Basin. Congress should act without delay to provide funds to begin construction on this project. It should be done now before another disaster strikes. The people of the valley need the disaster emergency relief that we have given them. But they have a far greater need for the kind of help that will prevent or greatly diminish the likelihood of major flooding.

How much wiser and more economical it seems to use our national treasure to prevent the destruction of irreplaceable lives and property than to spend huge sums just for flood relief each time disaster comes. How much wiser it seems to use our treasure to build the strength of the Nation.

We believe that Congress should make available this year enough funds to at least get started on all authorized projects where major flooding is a real danger. The Coosa-Alabama Rivers project in Alabama is in this category.

A large area of the basin is subject to flooding that is felt particularly at our capital city of Montgomery and at Selma, a few miles downstream on the Alabama River. The district engineer at Mobile, acting under a small allocation from general examination and survey funds, recently began an interim survey of the flood problems at these two cities. We have just secured a report from the district engineer as to the progress of the surveys and his preliminary findings as of this date. We are advised that the survey at Montgomery is about one-third complete and the Selma survey about 3 percent complete. Completion of both surveys was expected to be made out of 1952 fiscal year funds and we respectfully call to the attention of this subcommittee that the House has completely eliminated all funds for examinations and surveys. The Mobile district advises us that the indication to date is that these flood problems may be met by a system of low levees with about 3 feet of freeboard at Montgomery and Selma. We specifically questioned as to the extent that the construction of the Howell Mills Shoals Dam would affect the flooding at these two locations. We were advised

that under atmospheric arrangements as have prevailed in the past, construction of the Howell Mills Shoals Dam could be expected to reduce the floodwaters by from a foot to a foot and a half at Montgomery and by from six-tenths of a foot to almost a foot at Selma. We are advised that this is considered a "fair" reduction in relationship to the depth of floodwaters. We urge that funds be provided for general examinations and surveys so that flood problems throughout the Nation, such as that on the Alabama River may continue in a sound and orderly fashion. We ask that you give us the funds to enable the beginning of construction of the Howell Mills Shoals Reservoir to provide the Nation with vitally needed hydroelectric power, increased river navigation and that the people living in the basin may have the flood protection that the dam will give them.

APALACHICOLA, CHATTAHOOCHEE, AND FLINT RIVERS, FLA., ALA., AND GA.

This project provides for an expanded and improved initial step for multiple-purpose development of the water resources of the Apalachicola River Basin. It includes multipurpose projects at Jim Woodruff, upper Columbia, and Buford Dam sites, a navigation project at the Fort Benning site, and supplemental channel works. It will provide a 9-foot navigation channel from the Gulf of Mexico to Columbus, Ga., on the Chattahoochee River, and to Bainbridge, Ga., on the Flint River, together with extensive hydroelectric power development, flood control, water supply, and related features. Power installations will total 30,000 kilowatts at Jim Woodruff, 86,000 kilowatts at Buford, and 130,000 kilowatts at the upper Columbia Dam.

Work on the Jim Woodruff Dam is well under way at the present time. It is located immediately below the junction of the Flint and Chattahoochee Rivers, and will permit navigation in the lower reaches of the river from the Gulf of Mexico to Bainbridge, Ga., on Flint River, and to Columbia, Ala., on the Chattahoochee River. It will permit production of a large block of power in an area where there is an acute power shortage, and where it is urgently needed to aid the national defense program as the initial step in the development of the Apalachicola River system. This project will add an additional transportation facility which will greatly assist in relieving the transportation problem in time of war.

The budget estimate for this project was $7 million, of which the House allowed $6,300,000. We request restoration of the $700,000 eliminated by the House.

The Buford Dam and Reservoir is located in the upper reaches of the stream above Atlanta. It will provide flood protection to the Chattahoochee River Valley below the dam site, and an adequate water supply for municipal and industrial purposes in the metropolitan area of Atlanta, Ga. The project will provide an increased flow essential to the navigation project, and permit an increase in the firm capacity of existing downstream power developments. The reservoir will have a large value for public use due to its proximity to the popuated center of Atlanta.

The approved budget estimate for the Buford Dam is $900,000, none of which was included in the House bill. Since this project is under construction and is considered a highly essential unit, it appears wise and necessary to continue construction thereon to protect the Federal investment already made. Land acquisition should proceed, preparation of plans and manufacture of turbines and generators should continue, also the excavation of the tunnels and tailrace to be used for diversion. Restoration of the amount deleted by the House is requested.

The upper Columbia Lock and Dam will be located on the Chattahoochee River at the head of the pool formed by the Jim Woodruff Dam. It will consist of a concrete gravity dam, with a navigation lock and an ultimate power installation of four 32,500 kilowatt units. In order that completion of this project will follow that of Buford and Jim Woodruff at a reasonable time, early initiation of construction is highly desirable. Construction funds are requested for this purpose.

BAYOU CODEN, ALA.

The project is located on the southern coast of Alabama about 30 miles south of Mobile, and consists of a channel 4 feet deep and 40 feet wide, a distance of about 4,000 feet from Portersville Bay to Coden. The estimated cost is $4,700 and $700 has been expended for preparation of plans. The project can be completed within a short time after funds are made available.

Residents of the town of Coden and along the bayou obtain their livelihood primarily from the sea-food industry. Large investments have been made in packing houses, canning plants, ice plants, supply houses, oystershell grit plants, and other industries. New facilities are now under construction in the area.

These industries all depend upon the existence of an adequate channel to the harbor. Commerce over the existing shallow channel in 1948 consisted of 2,700 tons of sea-food, primarily oysters, shrimp, and crabs. This amount would be greatly increased upon completion of the channel, and the anticipated expansion of port facilities.

BAYOU LA BATRE, ALA.

Bayou La Batre is a tidal stream about 10 miles long emptying into Mississippi Sound about 21 miles east of Pascagoula Harbor, Miss. The project consists of deepening the channel from 6 to 9 feet, with a width of 100 feet, from deep water in Mississippi Sound 4.7 miles to the town of Bayou La Batre. The estimated cost is $83,700 of which $21,000 has been previously appropriated. Plans have been completed and the project can be placed under construction when funds are made available.

Bayou La Batre is one of the most important sea-food centers along the eastern Gulf coast. Additional depth is required to permit the use of modern deep-draft fishing and shrimping vessels and to serve established navigation. Commerce now averages about 15,000 tons annually, and would be materially increased upon completion of the authorized project and expansion of the sea-food industry

DAUPHIN ISLAND BAY, ALA.

Dauphin Island Bay is a small inlet lying between Dauphin Island and Little Dauphin Island on the west side of the entrance to Mobile Bay, about 30 miles outh of Mobile. The authorized project provides for a channel 7 feet deep, 150 feet wide, and about 1,400 feet long, from Mobile Bay to an anchorage basin 600 feet long and 400 feet wide in the marsh on Dauphin Island, and a channel 4 feet deep and 40 feet wide from that anchorage to Dauphin Island Bay, a distance of 6,000 feet. It also provides for construction of a jetty on the north side of the channel at a later date if deemed advisable.

The estimated cost of the project is $118,000. No work has been performed on the project. The channel work, estimated to cost $31,600 could be completed at an early date, and construction of the jetty deferred.

Dauphin Island Bay is centrally located with respect to the area where the greatest concentration of small craft, both commercial and noncommercial utilize Mobile Bay and adjacent waters. A large portion of fish, shrimp, and oysters caught off the Alabama coast are obtained from this vicinity. About 500 commercial fishing boats from Mobile and other points in or near Mobile Bay are regularly engaged in fishing in the waters surrounding Dauphin Island. An equal number of noncommercial craft navigate the waters of lower Mobile Bay and many of these base at Dauphin Island. There are no adequate harbors of refuge for small craft within 15 miles of Dauphin Island or lower Mobile Bay. The provision of this harbor of refuge would obviate the necessity of boats returning to their home ports during inclement weather, and would reduce operating costs.

FLY CREEK, ALA.

Fly Creek is a small stream about 4.5 miles long entering Mobile Bay from the east at Fairhope, Ala., 13 miles southeast of Mobile. The lower 1,200 feet of the stream is tidal. The River and Harbor Act of 1950 authorized a project consisting of a channel 6 feet deep and 80 feet wide from deep water in Mobile Bay to and including a turning basin 6 feet deep, 130 feet wide, and 350 feet long located near the first bend in Fly Creek at Fairhope. The estimated cost is $14,000 and no funds have been appropriated to date.

There are now 45 fishing craft based in the creek, and 15 noncommercial craft based in Mobile which would use Fly Creek if improved. The improvement would largely eliminate damage and loss resulting from grounding and cramped conditions now suffered. The annual benefits are estimated at $6,400. The nearest other protected inlet on the east shore of Mobile Bay is at Weeks Bay, 16 miles south of Fly Creek. There is an urgent need for a small-boat harbor on the east coast of Mobile Bay in the vicinity of Fairhope to provide suitable accommodations and a harbor of refuge for the numerous boats operating in this locality. The Nation needs the food supplies which these projects offer.

MAINTENANCE, OPERATION, AND CARE

These features consist of dredging to maintain widths and depths in navigation channels and anchorages of harbors and inland waterways; repairs of jetties and

breakwaters at harbor entrances; repair of dikes, levees, revetments, and other regulating works; and for maintenance, operation, and care of the locks and dams on navigable waterways. The principal completed projects in Alabama that will require funds for maintenance and operation are Mobile Harbor; Black Warrior, Warrior, and Tombigbee Rivers; removal of water hyacinths from navigable streams; Tennessee River; and the Intracoastal Waterway along the Gulf coast. This work is essential to prevent deterioration and permit their uninterrupted use. It is requested that the committee approve adequate funds for carrying on this necessary work.

PLANNING

It is noted that the House bill eliminates funds for continuing the construction of such important projects as the Cheatham navigation dam in Tennessee, the Buford Dam in Georgia, the Dexter power dam in Oregon, the Albeni Falls multipurpose dam in Idaho, the Oahe Dam in South Dakota, the Cleveland Harbor in Ohio, and the Red River of the North flood control project in Minnesota. It also fails to provide funds for planning important power and navigation projects already authorized and urgently needed in the defense industrial mobilization program of this country.

We think that is a mistake, and that planning should continue on all projects essential for defense or that fit into the program for a stronger domestic economy. This would permit prompt initiation of construction if the emergency should demand, or at the end of the present emergency. It would keep available a backlog of new projects ready for initiation as others are completed, and permit an orderly program of development of the water resources of the Nation.

EXAMINATIONS AND SURVEYS

The language of the House bill would lead one to believe that funds were included for examinations and surveys. The report of the House committee commits all funds toward construction of active projects, and specifically states that funds for planning and surveys are eliminated. This will prevent continuation of work on all surveys.

These examinations and surveys are specifically authorized by Congress. In general, they are instituted by our constituents who suggest projects for water-resources development needed in the area. When authorized, the Corps of Engineers makes a preliminary report, followed by a detailed survey if felt sufficiently justified and feasible from an economic and engineering standpoint. Under this bill in its present form all of these studies would be discontinued.

We believe that the collection and compilation of scientific data in connection with floods, storms, stream flow, economies, and other allied matters, are essential for planning and design of projects included in water-resources programs. Such collection should be continuous and the existing experienced organization should not be permitted to disband for lack of funds to operate.

We recommend that the bill be amended to include funds for examinations and surveys for navigation and flood control in the amounts recommended by the President in his budget message for fiscal year 1952.

Senator ELLENDER. May I ask permission to file a few letters which I have?

Chairman MCKELLAR. Without objection.

(The material referred to is as follows:)

SLIDELL, LA., *June 12, 1951.*

Hon. ALLEN J. ELLENDER,
United States Senator, Washington, D. C.:

Development now pending if dredging of Bayou Lacombe St., Tammany Parish, La., can be done. Operations consist of towboats and barges. Would involve a payroll in St. Tammany Parish of $125,000 per month. This operation to go on continuously and involve natural resources and timber, advancements and growing of timber of every kind. Consider this operation seriously and kindly get into action as quickly as possible. Kindly advise as to what I can expect. The engineering has been started toward development and work is scheduled to start July 1, 1951.

WILLIAM H. DAVIS,
Lacombe, La.

JEFFERSON ISLAND SALT CO.
Louisville 7, Ky., July 2, 1951.

Hon. ALLEN J. ELLENDER,
United States Senator,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR ELLENDER: With reference to exchange correspondence and our conversation of last week regarding the widening of the two bridges (highway and Southern Pacific Railroad bridges) at Delcambre, La.: The United States Government went to considerable expense in constructing the canals Bayous Petit Anse, Tigre, and Carlin, La. In accordance with House of Representatives Document No. 594, Seventy-eighth Congress, second session, the Bayou Carlin canal was widened to a width of 80 feet at the bottom having a 9-foot depth. Jefferson Island Salt Co. also went to considerable expense in building the canal up to its property adjacent to Lake Piegneur. The width of the clearance under both the highway bridge and the Southern Pacific Railroad bridge horizontal is 40.7 feet. Both of these bridges are lift bridges and the clearance vertical above mean low level at the railroad bridge is 49.7 feet and the highway bridge is 47 feet.

When the canal was originally built 40.7 feet horizontal clearance took care of movement of barges which at that time were approximately 195 feet long by 35 feet wide capable of transporting 750 to 1,000 tons of salt.

Conditions have changed, however. Today low-priced commodities such as sulfur and salt are being transported in barges 50 feet wide and 250 feet long which carry 2,500 tons per barge.

As I have advised you, the United States Government is constructing a chlorine plant at Muscle Shoals, Ala. which should be in production in late summer or early fall of this year and which will use approximately 360 tons of salt per day. On a 30-day basis this plant would use in excess of 10,000 tons per month or in excess of 120,000 tons of salt per year.

In addition to this there is in the planning stage another chlorine plant at Calvert City, Ky., and if it is built it will use approximately 200 tons per day There is also in the planning stage an expansion of the chlorine plant at Memphis, Tenn., which additional production of chlorine will use approximately 150 tons per day. Also there is available business for movement to St. Louis, Mo., amounting to approximately 30,000 tons per year for shipment from our plant. This latter plant now being served from Weeks and Avery, La., the total consumption for this plant is between 75,000 and 90,000 tons per year.

Both of these bridges should be widened to the same width as the canal proper, namely, 80 feet and we trust that Congress will issue an appropriation to take care of the widening of both of the bridges.

Very sincerely yours,

E. J. BACHMAN, *Vice President.*

MORGAN CITY-BERWICK CHAMBER OF COMMERCE,
Morgan City, La., April 30, 1951.

Hon. ALLEN J. ELLENDER,
Senate Chamber, Washington, D. C.

DEAR SENATOR ELLENDER: We were extremely pleased to note in the Times-Picayune on April 17, that approval of the proposed $440,000 10-mile dredging project in Six-Mile Lake and Grand Lake above Morgan City, La., had been given by Maj. Gen. Lewis A. Pick, Chief of the Army Engineers. We believe year-'round navigation in the Atchafalaya River is badly needed by all shipping interests, and we are deeply grateful to you for your efforts in this matter.

From the established claims on this project, it is indicated that the improvement will be of tremendous value to shippers and to consumers and that it will also tend to further the movement of critical materials in the present defense program and that it might be properly classed as an emergency.

In this connection, the thought has occurred to us that you might be able to investigate the matter further to ascertain if there are not presently available some unused or unpledged funds in the United States engineers treasury which might be used for immediate construction of this 10-mile project.

We are enclosing local publicity released in the Morgan City Review April 20 on the announcement of the approval of the project in Washington.

Again thanking you for your efforts in this matter, and hoping to hear from you in the near future, we are

Very truly yours,

J. E. KYLE, Jr.,
President.

LIVINGSTON PARISH POLICE JURY,
Livingston, La., April 11, 1951.

Senator ALLEN J. ELLENDER,
Washington, D. C.

DEAR SENATOR ELLENDER: In the interest of the citizens of Livingston Parish I would like to make a special request of you.

The Tickfaw and Natalbany Rivers which drain part of Livingston Parish are in dire need of dredging. As a result of logs, sand, and other debris in the channels of these rivers they cannot give proper drainage in times of excess rain.

I would like to make a request of you that you use your influence to secure Federal aid for a project to dredge Tickfaw River from its mouth to Holden, La. and Natalbany River from its mouth to Springfield, La.

Thank you for your attention given to this matter.

Sincerely yours,

MARSHALL WALL,
Police Juror Ward Six, Livingston Parish.

STATEMENT OF C. ELLIS OTT, OF BOGALUSA, LA., CHAIRMAN OF THE PEARL RIVER NAVIGATION COMMITTEE OF THE BOGALUSA CHAMBER OF COMMERCE

Gentlemen: I am making this statement to your committee in the interest of the proposed appropriation of $987,000 to complete the Pearl River project in Louisiana and Mississippi. This project was approved by the Congress August 30, 1935, and appropriations have been made from time to time and the work is now about 88 percent completed.

The total estimated cost of the project is $8,274,700 of which $7,287,700 has been provided, and the proposed appropriation of $987,000 will complete the remaining features of the project and make it available for use.

As the project cannot be used until all remaining features are completed, it would seem uneconomical not to supply the funds necessary for completion of the project, as 88 percent of the funds have already been appropriated and expended on this project. The city of Bogalusa has and will comply with the requirements of local interests as outlined in the project document. The taxpayers of the city of Bogalusa, La., voted a bond issue in 1938 to meet the requirements of local interests, which bond issue was carried by a favorable vote of more than 98 percent of those voting.

If sufficient funds are not made available to complete the project at this time, it will be necessary to suspend further work toward completion while considerable cost of maintenance and protection of the present work will be incurred during the suspension, during which time no use can be made of the waterway.

Many citizens and business interests in the area to be served by the waterway are ready and waiting for the completion of the project in order that movements of different kinds and types of materials and freight may be carried over this waterway, thus promoting an expansion of the business and industrial interests of the entire area served by the waterway, with a resulting increase in employment.

It is therefore respectfully urged that the requested appropriation and allotment of funds to this project of $987,000 be made so that the project can be completed and made ready for use in the near future.

OPERATION AND MAINTENANCE OF RIVERS AND HARBORS PROJECTS

Chairman MCKELLAR. You may proceed, Senator McClellan.

Senator MCCLELLAN. I will be very brief, Mr. Chairman.

This has developed since the hearing started, and I want to make a record of it.

As I understand, it will not require an additional appropriation other than what is already in the bill.

Am I correct?

OUACHITA RIVER LOCKS AND CHANNEL

Colonel MILNE. To answer your first question, the budget that was submitted by the President called for an over-all amount of $20 million for operation and care. In the make-up of that $20 million, there was a specific item indicated for the operation and care of the Ouachita River locks in the amount of $197,000.

Senator MCCLELLAN. $197,000. That is what I thought it was.

So that is in the budget and, while it is not specificly identified in the budget, it was included in the total amount of the budget request.

Colonel MILNE. Yes, sir.

Senator MCCLELLAN. Now, how many locks are there that you contemplate, that your recent order contemplated abandoning or discontinuing operation of?

Colonel MILNE. We plan discontinuing operations on three of the six locks.

Senator MCCLELLAN. Those pools are in the area of Camden and Crossett, where the large paper mills are.

Colonel MILNE. That is correct, sir.

Senator MCCLELLAN. And those locks were also operated during the war, were they not, during World War II? They were not discontinued, then.

Colonel MILNE. That is right, sir.

Senator MCCLELLAN. And these large industrial plants have grown up there since these locks were constructed, in order to get the benefit of the water industrially.

Colonel MILNE. That is correct, sir.

DEEPENING OF CHANNEL

Senator MCCLELLAN. And it is contemplated and was authorized last year, in the Omnibus Flood Control Act to increase the channel to 9 feet, to make the channel 9 feet up to Camden; is that correct?

Colonel MILNE. That is correct, sir.

Senator MCCLELLAN. Now, we are not starting that project at this time. I mean, deepening the channel. It had a 6-foot channel up to Camden heretofore?

Colonel MILNE. Yes, sir.

Senator MCCLELLAN. And you did spend some money dredging that channel in order to get navigation restored on a 6-foot basis.

How much did you spend for that?

Colonel MILNE. We started again, as you pointed out, during the war.

Senator MCCLELLAN. It had to be abandoned again, because they took all the barges for war purposes.

Colonel MILNE. And we started again to restore that to 6 feet, and as I recall, it was something in the neighborhood of $300,000 to get the 6-foot depth restored.

Senator MCCLELLAN. All of that money would be lost if these locks are closed now?

Colonel MILNE. As far as navigation is concerned; yes, sir.

Senator MCCLELLAN. As far as navigation is concerned. Now, it of course is contemplated that considerable navigation would develop after the 6-foot channel was restored, and particularly so after a

9-foot channel was constructed. We have had very little to develop thus far. That is correct, is it not? Up at these upper locks?

Colonel MILNE. There has been very little navigation. That is true.

Senator MCCLELLAN. But it is also true that before you can develop navigation, you have got to have warehouses and docks built. Is that not true?

Colonel MILNE. That is right, sir.

Senator MCCLELLAN. Now, I may say this for the committee's information. I at least am putting it up to those people down there that they have got to come through with the traffic, the shipments, and pledge them. Otherwise I cannot argue for this any longer; although the continuation of the locks may be justified from the industrial standpoint, primarily, it is a navigation project.

I may say that this is correct, too: Navigation was sufficient to justify the operation of them prior to the war. But when you had to abandon all of it, then, of course, the shipments all left there and went to other sources of transportation.

Now, in view of the fact that this item is in the budget, and it wasn't taken out by the House, and it is therefore now in the bill, if a statement is made in the report from this committee to the effect that in its judgment the operation of those locks should not be discontinued for at least another year, to give opportunity to shippers to develop the traffic there, and also in connection with the industrial uses to which these pools are applied, would that be adequate for you to continue operating the locks?

Colonel MILNE. Yes, sir.

Senator MCCLELLAN. Just a statement from the committee, in view of the fact that the money is already in the bill, that the locks should be operated, will be adequate.

Colonel MILNE. Yes, sir.

Senator MCCLELLAN. And that is all you would require?

Colonel MILNE. Yes, sir.

Senator MCCLELLAN. Now, Mr. Chairman, I would like to introduce at this point a resolution passed by the Arkansas Resources and Development Commission, which is the official body of our State dealing with these flood control matters.

Chairman MCKELLAR. Without objection, it is so ordered.

(The resolution referred to is as follows:)

RESOLUTION

Whereas the Corps of Engineers, United States Army, has announced the abandonment of three navigation locks and dams on the Ouachita River in Arkansas and Louisiana; and

Whereas the Arkansas Resources and Development Commission believes such abandonment is a serious blow to the development of the Ouachita Basin and to the cause of river development throughout the neglected basins of the Mississippi River system; and

Whereas the Congress of the United States in the 1950 Flood Control Act authorized the construction of a 9-foot channel on the Ouachita River, replacing the present inadequate 6-foot channel, and other improvement work designed to make navigation fully effective and stimulate the volume of merchandise moving on the river; and

Whereas the condition of the channel in recent years has discouraged use of the river for transportation; and

Whereas water supplies and control of pollution made possible by the present high volume of water which would certainly be reduced by abandonment of the

existing structures will result in tremendous losses to the economic interests now operating in the territory affected by the present order: Now, therefore, be it

Resolved by the Arkansas Resources and Development Commission, in regular session at Petit Jean State Park, on July 15, 1951, That the State government of Arkansas, represented by this commission, protests the order to abandon the Ouachita River locks and dams, and seriously urges the Corps of Engineers, United States Army, to reverse the order; and be it further

Resolved, That the Commission completely supports the petition of Senator John McClellan and others that maintenance of the locks and dams be continued for at least another year, and suggests that the Corps of Engineers join vigorously with the people of the valley in urging early construction of the work authorized by the Flood Control Act of 1950.

Adopted this 15th day of July 1951.

MARION L. CRIST,
Chairman.
WAYNE C. FLETCHER,
Executive Director.

Senator MCCLELLAN. And I would like to insert in the record also a paragraph of a letter which I have received from Mr. H. K. Thatcher executive vice president of the Ouachita River Valley Association, in which he refers to a conversation I had with him and others interested when Colonel Milne was present, and I told them if the shippers didn't get busy down there and develop that traffic this year and give us absolute assurances that they would continue to use this water transportation that was to be made available to them, I would not be in a position to come back and ask this committee again for further appropriations.

I do think they have not had adequate time, in view of it being disrupted and abandoned during the last war. But I do know it is vital, and I would like to have this paragraph of the letter inserted.

Chairman MCKELLAR. Without objection, it is so ordered.

(The material referred to follows:)

OUACHITA RIVER VALLEY ASSOCIATION,
Camden, Arkansas, July 26, 1951.

* * * * * * *

We have the town of Camden pretty well exercised over the proposition and several groups are considering the construction of a terminal warehouse and dock to be built at Camden. Early next week I am expecting Mr. T. M. Martin, president of the Lion Oil Co., to call a meeting of potential shippers on the river in order to get some definite tonnage pledged and movement started at once. I am telling everyone that it is up to the shippers along the river to protect navigation on the river and that they should not expect you to continue to use your high office to do something for them that they themselves should be doing. I am taking the liberty to repeat in substance what you said at the Saturday morning meeting in your office telling them that we only have a few months of grace, or 1 year at the most, then if something is not done river shipping might be forever lost on the Ouachita River.

Senator MCCLELLAN. Now, Mr. Chairman, I ask permission to insert in the record a letter or a statement from Mr. Claude Gregory, president of the Cache River-Bayou Deview Association, Jonesboro, Ark., with reference to the Cache River Basin, in which they make the statement that they are not asking for any additional funds this year because they realize what conditions are, but did want to get a statement in the record regarding their project.

Chairman MCKELLAR. Without objection, it will be put in the record.

(The statement referred to appears on p. 326.)

Senator MCCLELLAN. I wish to thank the chairman and the members of the committee. I did not know there was another witness.

I wish to thank you, and I will stay to hear him.

Chairman McKellar. There are two witnesses. Mr. Small is first.

STATEMENT OF JOHN D. SMALL, CHAIRMAN, MUNITIONS BOARD, DEPARTMENT OF DEFENSE

SUPPORT OF RIVERS AND HARBORS AND FLOOD-CONTROL PROJECTS IN NORTHWEST

Mr. Small. Mr. Chairman and gentlemen, I appreciate the opportunity of appearing here before you today in support of the civil functions appropriation bill.

The Munitions Board, as you know, is concerned with not only today's production of munitions but national security as we move forward to these difficult years ahead. And we have been very much concerned, on the Board, with the power shortage in the Northwest and the Southeast. Both areas are now short of power. Both areas undoubtedly will be short of power for some years to come unless we move forward on some of these projects and complete those under way.

The Northwest is particularly troublesome to us or worrisome; rather, to us, because of not only the atomic-bomb installations that are up there but the aluminum and like metals.

LOCATION OF ALUMINUM PLANTS

Mr. Wilson recently had a very well informed group of people investigate the aluminum situation, and I was shocked to find out one thing about it, that Mr. Secretary Chapman referred to briefly. That is, in the case of low water, what is going to happen up there? These aluminum experts who investigated the thing for Mr. Wilson say that under adverse water conditions we can anticipate losing about 200,000 tons of aluminum a year, under adverse water conditions due to lack of power. The Government direct munitions award, airplanes, guided missiles, and the like, is currently taking about 30 percent of the aluminum of the country. And, unfortunately, that aluminum, when it comes out of the aluminum system of the country, in very great part comes out of small business. There are thousands upon thousands of these little firms that manufacture munitions.

Senator Young. May I ask you this: Have you ever investigated the possibility of putting some of those aluminum plants in Mobile or surrounding area? There is something over 900 billion tons of lignite coal, and experts tell me they can generate current using lignite coal for approximately 3 mills or less per kilowatt. There is an 8½ million REA generating plant being constructed now in my State and they tell me they can sell current for 3½ mills and sell it and make money. There have been offers from people in our area trying to get plants of that kind, and private industry would furnish the capital to put up the generating plants necessary.

Mr. Small. Of course, for aluminum you must have cheap power.

Senator Young. You are subsidizing aluminum production in the East, where the electricity rates are much higher than they are in our area. Is that not correct?

Chairman McKellar. Most of the bauxite comes from South America?

Mr. Small. Yes; from Venezuela.

Senator Ellender. Mr. Small is cognizant of the fact that we have in the South a lot of cheap gas, and I assisted in presenting the matter to Mr. Wilson and others, as well as to Mr. Chapman.

And for the very reason that you pointed out a moment ago, having so many plants located in the Northwest, where you may have this water shortage, presents a serious problem. It might be a good thing to lean on, to have a few plants scattered about in the country, as Senator Young mentioned, and where we have natural gas. And I am happy to say that a good many of the people interested in stating where these plants would be located saw the light. We are having a couple of plants develop in the South.

Now, with respect to the bauxite, there is another thing there. We are close to the supply, just across the Gulf of Mexico, and there is no reason why the Gulf of Mexico should not be utilized by our country more or less as our only link between North and SouthAmerica and Central America, with the southern part of our country. It all adds up to the fact that you have the raw material nearby, and in the case of submarine warfare you do not have much to do to prevent losses through submarine attack, and then by utilizing this natural gas, you will have a source of supply there that is almost inexhaustible.

Mr. Small. Well, as you know, and as you said, we are putting in some plants along that line.

Senator Ellender. Yes.

Mr. Small. Whether or not we can have a dependable supply of bauxite from across the Gulf, I don't know.

Senator Ellender. That is where you get it now. You get it all from there now.

Mr. Small. It depends upon the Russian subs and how difficult it would be for them to penetrate the Gulf.

Senator Ellender. But how much easier it would be to get the raw material across the Gulf rather than across the Atlantic or the Pacific. I think you could better protect it there than in the Altantic or Pacific.

Mr. Small. The point I am making, Senator, is that just the plants that were up there, without talking about any new ones, were in a very ticklish position in the Northwest.

We are in a comparable ticklish situation down in the Southeast, where we have an enormous amount of power requirements, and certainly those plants that have been asked for here we recommend now.

From a defense point of view we recommend them to you.

I said I would take 10 minutes, Mr. Chairman. I can, if you like, go into this and give you the detail of most of these plants, but you are more familiar with it than I am.

Chairman McKellar. Put it in the record.

Senator Ellender. Mr. Small, you do agree with the proposition, then, that future expansion for the production of aluminum ought to be away from this area?

Mr. Small. Yes; I agree with that. Because I would agree that we should not have an undue concentration in any one place, of any one of our important things.

Senator YOUNG. Insofar as cost of electricity is concerned, you are now subsidizing aluminum production in several plants in the East, I think one or two in New York, as a result of the higher cost?

Mr. SMALL. Yes; we are taking that in the Government stockpile, because of the high cost.

I might add that quite a number of the projects which I talked about here in this statement were recommended by Mr. Forrestal back in 1948; the same individual projects that we are talking about now, he recommended them.

The Munitions Board has been pounding away at these particular projects since 1947, 1948, and 1949, up to now. So we have a very sincere and real interest in it, and we recommend them to your support.

Thank you, sir.

Chairman MCKELLAR. Very much obliged, sir.

Mr. SMALL. Thank you.

(The prepared statement of Mr. Small is as follows:)

STATEMENT BY JOHN D. SMALL, CHAIRMAN, MUNITIONS BOARD, DEPARTMENT OF DEFENSE

The Munitions Board's staff has for some time been increasingly apprehensive about the adequacy of electric power for defense purposes in various parts of the country.

Power supplies in both the Pacific Northwest and in the Southeast have been inadequate and have been the subjects of continuous scrutiny and attention by the electric power utilities of those two regions and by the Government departments involved.

The problem is particularly serious in the Pacific Northwest because there is very little fuel of any kind produced in the area. Approximately 85 percent of the electric power used comes from hydroelectric plants, which, of course, depend on the amount of water available and the portion of it which can be stored and controlled and used as needed. There has been a continual shortage of electric power in the Pacific Northwest since production of aluminum was begun there as a defense measure in the early days of World War II.

Surveys made by the Energy and Utilities Division of the National Security Resources Board indicated shortages through 1952 and those by the Defense Electric Power Administration and the Edison Electric Institute have indicated that shortages will continue in that area, under average water conditions, until at least 1953. The surveys have not projected requirements beyond 1953 but the indications are that shortages will continue until 1955 or 1956, at which time some of the large projects now under construction will be far enough along so that they can increase considerably the supply of energy. At present approximately 50 percent of the new aluminum produced in this country is made in the Pacific Northwest.

Because enough electric power is not available in the Northwest, only a portion of the additional aluminum and magnesium production capacity which is needed can be added there. It has been necessary to build large aluminum-reduction plants in the south-central part of the country and to provide them with electric energy generated by means of eight gas-fired steam plants or gas-Diesel internal-combustion engine-driven direct-current generators.

It is somewhat difficult to estimate an electric-power shortage because generation and use take place simultaneously, but if 350,000 kilowatts of power were available in the Pacific Northwest, it would be put to use immediately and, within a year, the area could absorb an additional supply of about 650,000 kilowatts or a total of approximately 1,000,000 kilowatts. In short, if a million kilowatts were to be made available there now, the industrial plant to use it would undoubtedly be built quickly and would absorb that amount of power.

The House eliminated from the Corps of Engineers civil works budget, fiscal year 1952, all funds for the Albeni [1] Falls project for which $10,000,000 had been requested. We recommend that this item be reinstated completely because the storage facilities which could have been completed by August 1952 would add 100,000 kilowatts of firm power to the Grand Coulee project and the 42,000

[1] Pronounced "Albany."

kilowatts of power from Albeni Falls, which would have been available in 1954, would be a valuable addition to the Northwest power supply.

The reduction by the House in funds for McNary Dam from $42.9 million to $36 million will result in the delay of a year and instead of power being on the line in December 1953 it will not be available until December 1954—unless funds to the extent of about $6,900,000 are restored. The power is badly needed—the 140,000 kilowatts which will be available initially could, if it were put to work, aid in production of all kinds of goods in the area and the 1 year's revenue from this part of the project would amount to approximately $2,400,000.

The House did not allow the $18 million requested for the initiation of the construction of The Dalles [2] project nor did it allow the $4 million requested for the beginning of construction of Ice Harbor Dam. The Dalles was scheduled to furnish 140,000 kilowatts of power by 1956 and 980,000 kilowatts by November 1959 and Ice Harbor is scheduled to have two of its three 65,000-kilowatt units in service in December 1955. These plants are in the area which serve the Hanford project. Power demands in this area are increasing so rapidly that power shortages are retarding normal load growth and industrial developments. We recommend the restoration of $18,000,000 for The Dalles and $4,000,000 for commencing construction on Ice Harbor.

If we do not initiate construction of new projects, the very rapid load growth in this area will, in a short time, result in a new and larger gap between demand and supply. If we then again start constructing plants, there will be an inevitable delay of 5 or 6 years during which period the area will again be constantly hampered by shortage of electric power. We request that appropriations be approved which will enable the start of construction on both projects.

The reduction made in appropriations for Lookout Point Reservoir from the $16,333,000 requested to $15,000,000 is a comparatively small one but is very important. It would postpone the completion of Dexter Dam, which is part of the Lookout Point project, by 1 year. Its completion is necessary to control surges in the river which would be caused by the large flow of water from Lookout Point—which is designed to be operated primarily as a peaking-load plant. Consequently, if Dexter Dam is delayed for a year, Lookout Point powerhouse cannot be used in its proper function for a year. Lack of Dexter reregulating dam will result in a loss of generating capacity at both plants because Lookout Point will have to let the water go down stream at almost the same rate at which it flows into the reservoir. Operating Lookout Point in this manner will also prevent it from fulfilling its function in the flood-control plan, which is the primary function of the Middle Fork-Willamette system of reservoirs.

Another project which should be started is Old Hickory Lock and Dam in Tennessee and we recommend inclusion of the $8,000,000 asked by the corps to begin work on this job. The power demands of this area are increasing at a very rapid rate due not only to the unusually large load growth in this area but also to the extra demands of the defense effort. The output from Old Hickory will be fed into the TVA system and if appropriations are made, the first unit could be put into operation in March 1954 with the balance—75,000 kilowatts—to be added in 1955. We need every bit of power we can get in this area and I hope that this $8,000,000 request will be granted.

In the southeastern part of the country the high rate of economic growth and development has brought greatly increased demands for electric power and energy. Requirements of this section for power have increased at a more rapid rate than in any other part of the United States. Added to these unusual increases are very large individual loads brought about solely by the defense emergency. These loads include approximately 1 million kilowatts for the Atomic Energy Commission at Paducah, Ky., large increases at the Arnold engineering development center at Tullahoma, Tenn., and at the Atomic Engineering Commission's new project in South Carolina. Many other large loads of industrial character have been put into this area recently. New military loads in the Southeast will also be new increments which were not planned for until recently.

Up-to-date estimates by the Defense Electric Power Administration indicate that, under average water conditions, the Southeast will have no margin available for additional loads until after 1953. The date when this area can be expected to be able to meet the increased demands is problematical but it will probably be in satisfactory condition by the end of 1955.

Projects which will bring in new power in the shortest time in critical areas should be pushed to completion as rapidly as possible. Electric power is one of

[2] Pronounced "Dells."

the most important means by which we multiply our human strength. There is no substitute for it and our entire industrial effort is dependent on it.

Chairman McKellar. All right, Mr. Shoemaker. Will you come forward?

THE PANAMA CANAL

STATEMENT OF RICHARD SHOEMAKER, LEGISLATIVE REPRESENTATIVE, GOVERNMENT AND CIVIC EMPLOYEES ORGANIZING COMMITTEE, CIO, WASHINGTON, D. C.

RESTORATION OF HOUSE CUT

Mr. Shoemaker. Mr. Chairman, I am legislative representative of the Government and Civic Employees Organizing Committee, CIO.

With your permission, I will file this statement for the record and high light it briefly.

Chairman McKellar. Are there any high lights now that you want to mention?

Mr. Shoemaker. Yes, Mr. Chairman. I have been impressed with the testimony today, in view of the showing as to the disaster that has occurred in the Missouri River, and how it has pointed up the need for corrective action in terms of many of the Army functions.

I have in mind at this time another type of disaster, which should not be overlooked. That is the growing sentiment against the United States in the Republic of Panama. I think a small investment by the United States may well be as profitable an investment in terms of our international relations as the investment in many of these worthy projects of the Army will be in the security of the United States as well.

HOUSE REPORT

I have particular reference to the cut made by the House, the $73,000 in the original appropriation requested by the Bureau of the Budget, of some $94,000 for housing in the Republic of Panama. The House report stated:

> The committee is well aware of the fact that in times past it was necessary to charge low rental rates as an inducement for skilled workers to live in the Canal Zone. It has been obvious for many years now that the need for such inducement no longer exists. The Secretary of the Army is, therefore, urged to take immediate steps to increase the rentals to provide for more rapid amortization of costs of construction and the entire cost of maintenance. It would even not seem abhorrent for the Government to make a small profit on the operation.

WAGES

I want to comment on the fact that nowhere in the House report is any statement made in reference to the local pay raise in the Federal Government in the Panama Canal Zone. The local rate employees are at an average wage of 53 cents per hour, as compared to the local rate among United States employees of $2.15 an hour.

The cost of living in the Canal Zone is high, or even higher than it is in the United States, and it is beyond my comprehension how people making as low as 53 cents an hour can subsist. Part of the reason they are able to is because of the subsidized houses in the zone.

Senator ELLENDER. How do they live outside of the Panama area, which we occupy? They do not get 50 cents, do they?

Mr. SHOEMAKER. They get approximately the same wage; yes, sir.

Senator ELLENDER. How about the housing outside of Panama? Is it any better than they get in the Canal Zone?

Mr. SHOEMAKER. It is no better.

Senator ELLENDER. I should think it is much worse.

Mr. SHOEMAKER. I think for the same price a great deal of it is much worse; yes, sir.

I want to point out to this committee, however, that the Panamanians resent the treatment of the Panama citizens in the Canal Zone by the United States Government. The differential in wages made between United States rate employees and local rate employees is such that we have already had in 1948 a very serious, we might say, minor warning, not the flood, but at least a minor warning, when the United States requested renewal of its air bases in the Republic of Panama, and the Panamanian Assembly was ready to grant a renewal of these leases, but there was a demonstration of approximately 50,000 Panamanian citizens against a renewal of these bases; and that in spite of the fact that the renewal of the bases, of course, would bring additional money, additional American dollars, and additional purchasing power to the Republic of Panama. But the Panamanians feel so intensely in regard to the treatment of their own Panamanian citizens by this United States Government that they brought about this demonstration.

Senator ELLENDER. Why should they object, if they do not do any more for their people than we do for theirs within the same area? That is what I cannot understand. Why do they not improve their own living standards rather than criticize us?

Mr. SHOEMAKER. The United States Government is responsible for the living standards within the Canal Zone.

Senator ELLENDER. But they are better paid in the Canal Zone than outside?

Mr. SHOEMAKER. Somewhat better, yes.

Senator ELLENDER. A good deal better.

Mr. SHOEMAKER. The employees in the Panama Canal Zone ascribe, whether rightly or wrongly, a lot of their problems to the policies of the United States.

Senator ELLENDER. The Government of Panama might have a lot to talk about if they treated their citizens, their own workers, different than we treat theirs within their zone.

Mr. SHOEMAKER. That may be true, sir.

Senator ELLENDER. Why, of course.

RESENTMENT AGAINST UNITED STATES

Mr. SHOEMAKER. Nevertheless, the Panamanian Government utilizes the situation in the Canal Zone to whip up the people's feeling of resentment against the United States, and as a matter of fact, in almost every national election you will find that this treatment of Panamanian citizens by the United States is utilized.

Chairman MCKELLAR. What kind of treatment? What do we do to them that they resent?

Mr. SHOEMAKER. Well, principally, it boils down to the differential in wages paid for the same work.

Where you have two people working side by side, one getting a small wage and one a relatively large wage, naturally there is resentment.

NUMBER OF EMPLOYEES

Senator ELLENDER. What is the proportion of employees between Panamanians and Americans?

Mr. SHOEMAKER. There are a little over 20,000 local-rate employees and approximately 5,000 United States-rate employees.

Senator ELLENDER. But the 5,000 Americans are more or less engaged in skilled work, in contrast to the menial work done by the Panamanians. Is that not true?

Mr. SHOEMAKER. Well, there are many skilled Panamanians, Senator.

Senator ELLENDER. But they get more than 53 cents an hour.

Mr. SHOEMAKER. And they are doing precisely the same grade of work.

Senator ELLENDER. They are getting more than 53 cents an hour?

Mr. SHOEMAKER. This is an average, this 53 cents.

Senator ELLENDER. But what is the differential between a skilled Panamanian doing the same kind of work as a skilled American?

Mr. SHOEMAKER. In just a minute, Senator, I think I can give you an answer.

Senator ELLENDER. I thought you could give it offhand. I did not want to take your time and the time of the committee.

Senator MCCLELLAN. I just wonder what the impact would be if we paid the Panamanians the same rate that we pay our own. What effect would that have on the rest of the country down there?

Mr. SHOEMAKER. The Government has officially taken the position that they desire that the local rate employees be paid, and were willing to meet the United States rates.

Chairman MCKELLAR. If we did that for one government, we would have to do it for other governments. There are 84 governments that we are contributing to now.

Mr. SHOEMAKER. There is a vast difference between our operation in the Panama Canal Zone, where we have leased the Panama Canal in perpetuity, and these other cases. When the Panama Canal was originally built, there was the theory then started that local Panamanians and Latin Americans should not be paid such high wages that they would disrupt the economy of Panama.

Senator ELLENDER. That is just the point that Senator McClellan just raised, there; that if you gave to the Panamanians working on the Canal the same rate as you give Americans, then you start a lot of trouble there. I do not think there is any doubt about it.

But what we are trying to do is to give them about the same amount.

And there is another thing you are overlooking—that the people living in Panama itself, that is, the part we occupy, are so much better off than in Panama itself, that is, in the country beyond this 10 mile strip. They have better housing and better protection from disease and everything else. You know that.

Have you been there?

Mr. SHOEMAKER. No; I have not, sir.

Chairman MCKELLAR. You ought to go down there.

Senator ELLENDER. You ought to go down and look at it and see it. They are so much better off. There is no comparison.

Mr. SHOEMAKER. We have the president of our local union, who is presently in town——

Senator ELLENDER. Do these men belong to your union?

Mr. SHOEMAKER. Yes, sir.

Senator ELLENDER. I see. And you are advocating their cause here.

Mr. SHOEMAKER. That is correct.

CURRENCY EXCHANGE

I want to finish, however, what I started to say, that when the Panama Canal was originally constructed, that was the theory upon which the local rate employees were paid. At that time you could get five balboas for one American dollar, and the local rate did not create any hardship among those employees at that time.

Chairman MCKELLAR. How is it now?

Mr. SHOEMAKER. It is interchangeable, Mr. Chairman.

Chairman MCKELLAR. They are of equal value?

Mr. SHOEMAKER. Equal value, one to one.

Chairman MCKELLAR. That ought to be very helpful. There are very few countries in the world where that exists.

Mr. SHOEMAKER. But the local rate employees can't buy five times as much with the balboa as they could when the Panama Canal was originally started.

Chairman MCKELLAR. I remember when the Panama Canal was built. That was before you were born. The Panamanians were just absolutely wild to have our country build that Canal. I was a youngster, but I kept up with what was going on. And I have never known any people so enthusiastic.

Senator ECTON. Your contention is that when the Canal was built, the natives down there had five times the advantage they have now under the equal exchange?

Mr. SHOEMAKER. Under the equal exchange, that is right. Any person now working in the Canal Zone can tell you he can take his salary and work in Costa Rica or other places, but not in Panama Canal or the zone itself.

Senator ELLENDER. That is because of the better conditions developed in that area through the building of the Canal.

Mr. SHOEMAKER. It is because Panamanians have more and more patterned their lives and even their education on Americans. When Panamanians originally sent their children, they sent them to France and Spain. If they patterned their lives on the patterns of the United States, I think they should have some opportunity of being paid to realize some of the things that they are being taught to wish or want or achieve. In other words, we can't seem to have them caught on both sides, on one side to pay them according to standards which we considered in South America, and at the same time bring them up in terms of our American standards, and preaching to them our ideals of democracy, and so forth.

ABSORPTION OF AMERICAN IDEAS BY PEOPLE OF PANAMA

In other words, through the years, the 40 years that the Panama Canal has been in existence, there has been a gradual trend, a greater tie-in of the economy of the Panama Canal, the Republic of Panama, into the economy of the United States, whereas the premise that these people should be paid according to local rates is no longer a valid premise, because of the changed conditions imposed upon the Republic of Panama by the mere existence of the zone itself.

Senator ECTON. You think that the Panamanians have developed an American taste, and they cannot pay for it?

Mr. SHOEMAKER. It is more than that, sir. In addition to that, there is the cost of living. The Republic of Panama has risen far more, because of the impact of the economy of the United States on the Republic of Panama.

Chairman MCKELLAR. It has hurt us the same way.

Mr. SHOEMAKER. As I pointed out just before, our members down down there would have no objection if they could live in Costa Rica with what they could earn in the Canal Zone. But they can't live in Costa Rica. They have to live in the Republic of Panama or the Canal Zone. That is where the rub comes, because the prices in Panama are as high or higher than in the United States, and they can't live on the increase now. It is literally impossible.

Chairman MCKELLAR. I know where I live the prices have more than doubled in the last year.

Mr. SHOEMAKER. The cost of living is rising, yes.

Chairman MCKELLAR. I think we ought to consider this question. Do you think we ought to cut down our own level of living and give it to the citizens of another country because they are made at us?

PRESENT REQUEST LAST APPROPRIATION

Mr. SHOEMAKER. Well, no. As a matter of fact, under the public law recently passed, next year the Panama Canal Zone is supposed to become self-sustaining and not cost the taxpayers anything. This particular year is a transitory year. This particular year the Panama Canal Zone was put into the Treasury, and regulations were made under Public Law 141.

Senator ELLENDER. But there will not be any money to come in. There will be just the same amount, and you will have just a book-keeping transaction. As far as the Treasury of the United States is concerned, it will not be increased a penny.

Chairman MCKELLAR. I expect I have voted for more labor bills than any man in the Congress. Or there is not more than one other ahead of me in that, anyway. I have the greatest sympathy and respect in the world for the workingman. But I am an American first. Let us not be led astray, when people are mad at us for not giving them what they want. I am speaking as a labor man right now.

Mr. SHOEMAKER. It is true that these employees are not United States citizens. But they are nevertheless employees of the Federal Government.

And how this Federal Government treats its own employees of no matter what nationality, certainly has a very serious impact on the opinion of Latin-American countries.

Chairman McKellar. Let me make a suggestion to you. You are a union man. Down in Oak Ridge, Tenn., the Federal Government owns a plant. They do not allow a man to go in business without a license from a New York company known as the Roane-Anderson Co. They do not have a right to vote in municipal elections.

They take no possible part in local government. They have to pay whatever rents are required by this company. They pay whatever rents are required to be paid. Their rents have been raised 18 percent in the last 2 years, and they were notified the other day that they were going to be raised 28 percent more. And thereupon, I got a bill through, which I hope the House passed today. It passed the Senate Friday, and I understand it was to be passed or will be passed or has been passed this afternoon, to make it a law, not permitting that raise in rents.

I think the people of our own country come first when it comes to things like that.

It is the worse case of vandalism that I have ever known, unless it is at Hanford, out your way, Senator Ecton.

Mr. Shoemaker. I agree with you wholeheartedly, Mr. Chairman, in regard to that.

Chairman McKellar. We pay these people mighty good wages down there.

Mr. Shoemaker. We did pay them good wages when the Panama Canal was originally constructed. We cannot have a miniature United States Government in the middle of the Republic of Panama for 40 years without vastly affecting the economy of that country.

Latin Americans are looking to Panama as a reflection of the democracy they hear preached, and what they see practiced down there is not very good testimonial to what we preach.

Chairman McKellar. You have two or three Panamanians come here, and I will take you and the Panamanians and show you how a real government, like the Roane-Anderson Co., conducts things. It sells the privilege to sell liquor, an exorbitant price being asked. Nobody knows where the money goes. They give the right to sell food, bread, and meat to this man and that man. And they get big prices for it. But nobody ever knows where the money goes. We have not found out yet where the money goes. Oh, it is a wonderful government. It is the most autocratic government on the face of the world, not even excluding Russia. It is more autocratic than the Russian Government, that little government down at Oak Ridge, Tenn.

Let us look after our own matters.

I am a workingman like you are. I have always believed in work. I believe it is one of the finest words in the English language. For heaven's sake, let us not run off about these meetings held by foreigners, because we do not give them something.

Mr. Shoemaker. I think this vitally affects our interests. We are spending today billions of dollars cultivating good will.

Chairman McKellar. Yes, sir; and it is thrown away for the most part of it.

I want to say to you that in my judgment we are throwing away that Government money every day.

Mr. Shoemaker. The reduction of $73,000 in the appropriations can probably do us much more harm in Latin America in our relation-

ships than anything else, while we are making a great many larger appropriations to assist the foreign countries to get on their feet.

Chairman McKellar. That is something that will have to be worked out. This is not a legislative committee. This is simply an appropriations committee.

RESTORATION REQUESTED

Mr. Shoemaker. Well, sir, I am requesting that the $73,000 eliminated by the House in the appropriation bill to subsidize housing in the Canal Zone be restored because of the impact on the local rate of employees in the Panama Canal Zone.

Senator Ecton. Mr. Shoemaker, what I would like to have, and I think it would be very valuable for the committee, would be, for instance, knowledge as to the situation of a good mechanic, an American down there, working as a mechanic. We would like to know what he gets per hour, together with the rate of the comparable mechanic, a Panamanian, working side by side with him.

Chairman McKellar. Can you get that information for us? Get it and put it in the record. We would be glad to have it.

(The information had not been supplied at the time the hearings were concluded.)

TYPE OF UNITED STATES WORKERS IN PANAMA CANAL ZONE

Senator Ecton. Then we would have an actual comparison.

Senator Ellender. That is what I asked a while ago. He started to look it up. He gave us an average of 53 cents.

Senator Ecton. That is all the employees. What we want is specific news.

Chairman McKellar. I would like to have the real facts.

Mr. Shoemaker. I will get those figures.

Senator Ellender. We do not have Americans going down there just as laborers, of course.

Mr. Shoemaker. No, they go as skilled craftsmen.

Chairman McKellar. Most of them, artisans, I think.

Senator McClellan. Is that all, Mr. Chairman?

Chairman McKellar. That is all, if you have finished.

Mr. Shoemaker. I thought I would bring to the attention of this committee the implication of this situation.

Chairman McKellar. If it is an abuse of the United States, I want to beg you not to put it in the record.

Where these people are abusing our country, let us not do it. You and I are Americans. We are God-fearing Americans. We do not want to give money to those who abuse us. Oh, no. Let us not do that. As American citizens, let us not do that. For heaven's sake, let us not do it.

I am talking to you for your benefit as well as for the benefit of all young men. Let us stand by America until hell freezes over.

Mr. Shoemaker. I agree with you, Mr. Chairman. And I think that the nonrenewal of the air bases of the Panama Canal Zone points up the progress of this issue to us as Americans.

Chairman McKellar. If we cannot take care of ourselves, the Panamanians cannot take care of us.

Mr. Shoemaker. The Panama Canal is very vital to our defense, Mr. Chairman.

UNITED STATES BASES LOST THROUGH FAILURE TO RENEW LEASES

Senator ECTON. Did I understand you to say a while ago that the Panamanian Government had voted not to renew the leases on the air bases?

Mr. SHOEMAKER. Yes; they voted 51 to 0, as a matter of fact, after the public demonstration.

Senator ECTON. When did that happen?

Mr. SHOEMAKER. 1948.

Senator ECTON. And when are they supposed to be renewed?

Mr. SHOEMAKER. They canceled leases and to my knowledge they have not been renewed since.

Senator ECTON. We are operating there by sufferance? Is that right?

Chairman MCKELLAR. Are we just operating there by sufferance?

Mr. SHOEMAKER. The air bases are not being utilized. Because the leases were not allowed us. These leases were in Panama, not in the zone itself.

Chairman MCKELLAR. You may put anything in the record except abuse of the United States.

I held my hand up to God and said that I would defend the United States against all enemies, foreign and domestic, and I want to keep that oath.

Mr. SHOEMAKER. I do want to say, Mr. Chairman, that our organization is responsible for eliminating the United Public Workers from the Panama Canal Zone, and therefore we felt we did a very essential service to the United States Government, in eliminating that organization from the Panama Canal Zone. The United Public Workers was expelled for Communist domination.

Chairman MCKELLAR. You go down there and get the information and bring those Panamanians, and let me show you a real oligarchy right here in this country.

(The prepared statement of Mr. Shoemaker is as follows:)

STATEMENT BY RICHARD SHOEMAKER, LEGISLATIVE REPRESENTATIVE GOVERNMENT AND CIVIC EMPLOYEES ORGANIZING COMMITTEE, CIO

I am appearing before this committee in an attempt to restore the cut made by the House in the appropriations for the Panama Canal Zone. I have particular reference to the item of $94,396 for that portion of the housing operation charged to the Canal Zone government which was requested in the original budget. This item was cut by $73,000.

House Report No. 544 states, "The committee is well aware of the fact that in times past it was necessary to charge low rental rates as an inducement for skilled workers to live in the Canal Zone. It has been obvious for many years now that the need for such inducement no longer exists. The Secretary of the Army is, therefore, urged to take immediate steps to increase the rentals to provide for more rapid amortization of costs of construction and the entire cost of maintenance. It would even not seem abhorrent for the Government to make a small profit on the operation."

It is significant that in the reasons given nothing was said about the local rate employees, 55 percent of whom live in the Zone. These Federal employees simply cannot afford to pay more for housing. The average wage for local rate employees is $0.53 per hour. We do not deny rents are low. We do not deny housing is subsidized. However, everything else that local rate employees buy except cigarettes are as high or higher than what is charged in the United States. The cost of living in both the Zone and in the Republic of Panama is higher than they are in the United States. Local rate employees pay the same prices as United States rate employees who are earning on an average of $2.15 per hour. These local rate employees simply cannot make ends meet on their present income.

We are aware that under Public Law 841, the Canal Zone is supposed to become self-sufficient. So far, current developments seem to indicate that it is to become self-sufficient at the cost of the local rate employee. The cost of medical services has already been boosted. Plans are now under way to increase prices in the commissaries. The proposed budget slash would require increased rents. Local rate workers just can't meet these increases under the present pay schedule.

The Canal Zone administration not only has direct control of wages, but it also establishes the prices to be paid for commodities and rents. We have no quarrel with the way Congress may wish to allocate funds. If, in its opinion, however, housing should not be subsidized, then the $73,000 cut should be restored, as an allocation for increased wages for local rate employees to pay the increased rentals. On their average wage of $0.53 per hour, they can hardly meet the rents charged them now.

Members of the committee, today we are spending billions on defense and on economic aid. Yet this cut of $73,000 may well do more harm to our relationships with Latin-American countries than a $1,000,000 cut in economic aid. Panama stands as the crossroad of Latin America. Not only is it a great transit center for shipping, but the airlines land there on their way between South and North America. The Panama Canal Zone stands as a living example of American democracy in action. We are being judged, not on the ideals we preach nor on what we say, but what we do in practice. That practice in the Canal Zone is not flattering to the United States. The Panamanians and all Latin Americans resent the treatment of noncitizen employees in the Zone , particularly in regard to the wages paid. This anti-American feeling has been growing in Panama. This resentment was noticed by Lester Velie, who writing in the January 20, 1951, issue of Collier's stated in his article, The Panama Canal Is Wide Open to Attack: "When the Republic of Panama celebrated its Independence Day November 3 and school children paraded with an array of United Nations flags, spectators paid their respects to the foreign countries by applauding warmly. But when an American veterans' group from the Canal Zone marched by with the Stars and Stripes, there was a painful silence."

It was this feeling of resentment and bitterness because of the treatment accorded Panamanian citizens in the Canal Zone which precipitated the "base incident" in 1948, when the people pressured the National Assembly into rejecting the renewal of air bases to the United States Government. The vote was 51 to 0. This occurred despite the fact that sober-minded citizens pointed out to the Assembly that Panama would suffer an economic loss as a result. This is but one illustration of how the policies of the United States in the Canal Zone adversely affect the defense of the Canal and of the hemisphere.

Justifications for Restoration of Items Discussed

Justification for Restoration—Maintenance and Improvement of Existing River and Harbor Works

Item No. 1.—*Demopolis Lock and Dam, Ala.*

Total estimated Federal cost	$20, 843, 000
Allotments to date	3, 438, 900
Additional to complete	17, 404. 100
Approved budget estimate	4, 500, 000
Amount allowed by House	4, 000, 000
Restoration requested	500, 000

EFFECT OF REDUCTION

A reduction of $500,000 in the approved budget estimate for construction of the lock and dam, would delay an orderly economical prosecution of the work on this feature which is necessary in order that the contract be completed at its scheduled date.

JUSTIFICATION FOR RESTORATION

It is urgent that sufficient funds be allotted so that the Demopolis lock and dam may be completed at the earliest practicable date since it will replace four obsolete locks on an important waterway which serves the highly industrialized centers of Birmingham and Mobile.

ITEM NO. 10.—*Illinois waterway, Illinois (excluding Calumet modification)*

Total estimated Federal cost	$29, 164, 800
Allotments to date	27, 422, 300
Additional to complete	1, 742, 500
Approved budget estimate	300, 000
Amount allowed by House	----------
Restoration requested	300, 000

EFFECT OF REDUCTION

Item 3 (d): The hazardous conditions above Marseilles Dam cannot be remedied and the probability of damage to the installation and navigation will still prevail.

JUSTIFICATION FOR RESTORATION

The Illinois waterway is an important link in the inland waterway system of the country, connecting the Great Lakes with the Mississippi River system. Traffic on this major transportation artery is increasing substantially as shown in the following tabulation for recent years:

Calendar year:	*Tonnage*
1947	10, 165, 293
1948	12, 272, 945
1949	12, 895, 114
1950 (estimated)	14, 500, 000

In the reach between miles 247 and 250, navigation is seriously affected by existing channel conditions. During periods of high water the present channel alinement, together with prevailing cross winds, forces navigation into the strong draw toward the Marseilles Dam. The strong adverse current has caused two collisions at the dam. Recently one tainter gate was damaged to the extent that complete replacement was necessary. Previously, one sinking occurred. Dredging, to straighten the channel, will aid materially in relieving present hazardous conditions and preventing future damage, both to navigation and to the Marseilles Dam. Navigation interests have repeatedly petitioned for this channel improvement. About 75 percent of the traffic shown above passes this location. The probability of damage to the installation could result in loss of the pool, which would cause delays to traffic and the transport of vital commodities such as oil, gasoline, and coal to the heavy industrial area of Chicago.

Item No. 11—Mississippi River between Ohio and Missouri Rivers (Chain of Rocks Canal)

Total estimated Federal cost	$39, 825, 000
Allotments to date	33, 528, 000
Additional to complete	6, 297, 000
Approved budget estimate	5, 200, 000
Amount allowed by House	5, 000, 000
Restoration requested	200, 000

EFFECT OF REDUCTION

Under item 2 "Canal and levees," the President's budget contains approximately $503,000 for underseepage measures for the east canal levee. The House reduction of $200,000 will result in delay in completion of these underseepage measures beyond the date of completion of the levee. If high flood stages should occur on the Mississippi River before completion of these measures, the levee will be subjected to severe hydrostatic pressure with the consequent threat to stability of the levee.

Since the east canal levee provides protection to the East Side levee and sanitary district, for a length of 10 miles, underseepage works should be initiated and completed in fiscal year 1952, in order to insure the stability of the canal levee and avoid the danger of flooding the very important industrial area contained within the East Side levee and sanitary district.

JUSTIFICATION FOR RESTORATION

Completion of the Chain of Rocks Canal, including the east canal levee and underseepage measures, are important to the national defense. The canal will facilitate the movement of vital commodities passing this dangerous Chain of

Rocks reach at all stages of the Mississippi River. The east canal levee and attendant underseepage measures will assure the continued protection of the East St. Louis, Ill., area, which contains a concentration of manufacturing industries and transportation lines of great importance to the defense effort.

ITEM NO. 13.—*Ohio River open channel work*

Total estimated Federal cost	$21, 546, 300
Allotments to date	15, 873, 100
Additional to complete	5, 673, 200
Approved budget estimate	175, 000
Amount allowed by House	160, 000
Restoration requested	15, 000

EFFECT OF REDUCTION

The amount contained in the approved budget estimate covers dredging in the Ohio River at seven locations, namely, Stillhouse Run Bar at mile 116.5 below Pittsburgh, $12,500; Sims Run Bar a mile 116.8, $10,000; Gardners Run Bar at mile 117.5, $12,500; Sunfish Ripple at mile 118.5, $17,500, below lock No. 15 at mile 129.5, $42,500; Williamson Island and Witten Towhead at mile 135, $60,000; and Brothers Islands at mile 159, $20,000. The reduction will result in elimination of dredging at the location of lowest priority which is that proposed at Sunfish Ripple. The bar at this location is in a relatively sharp bend in the river. Removal of the bar along the inside of the bend is necessary to provide a channel of sufficient width for the safe and expeditious navigation of large tows of oil, steel, coal, and chemicals that are now moving in this reach of the river.

JUSTIFICATION FOR RESTORATION

The budget estimate should be restored in order that essential improvement of the channel at Sunfish Ripple can be performed at an early date. A condition such as that now existing at this location increases the hazards and travel time of large tows meeting within the limits of the bar, thus reducing the efficiency of this important segment of the inland waterways system that is assuming an increasingly important position in the defense effort with the continuing increase in river traffic.

ITEM NO. 25—*Newark Bay, Hackensack, and Passaic Rivers, N. J.*

Total estimated Federal cost	$9, 822, 000
Allotments to date	7, 790, 000
Additional to complete	2, 032, 000
Approved budget estimate	732, 000
Amount allowed by House	690, 000
Restoration requested	42, 000

EFFECT OF REDUCTION

The entire allocation for 1952 of the approved budget estimate was to be applied to an existing continuing contract commitment for work which is scheduled for completion by December 12, 1952, and would provide for uninterrupted dredging operations under normal progress to June 30, 1952. Any reduction would delay removal of the rock cut-off at the entrance, which work is urgently needed in the interests of safe navigation.

JUSTIFICATION OF RESTORATION

It is essential that the 35-foot main channel in Newark Bay be completed without undue delay. By November 1951 the 35-foot main channel in Newark Bay to Port Newark terminal will be completed with funds already provided, except for the removal of the rock area in the triangular cut-off at the entrance to Newark Bay. The sharp bend at Bergen Point makes it difficult for vessels to round the turn from Kill Van Kull to Newark Bay and renders navigation hazardous. Because of the existing rock in this locality, vessels which are carried by the tide toward Bergen Point are subject to heavy damage. Removal of this rock area is necessary for the safe navigation of the larger-type vessels which will use the deepened channels. Even under present use of the channel by smaller vessels, difficulties are encountered in rounding the turn at Bergen Point, especially at

times of adverse tidal conditions. Recently the hopper dredge *Sandmate*, owned by private interests, struck the bank at Bergen Point and now lies sunk in Newark Bay. The cost of its removal and reconditioning will probably exceed $500,000.

The Port of New York Authority recently completed the conversion of Port Newark terminal into a modern terminal for seagoing vessels at a cost of $14,000,000. The terminal and transfer facilities of the port of Newark are among the most extensive within the metropolitan New York area. This port is one of the few terminals which provides for direct interchange of freight between railroad trunk lines and oceangoing vessels. Recently, the Department of the Air Force leased a portion of Port Newark terminal for the receipt, storage, and transshipment of planes and other material being shipped abroad, primarily to North Atlantic Treaty countries under the mutual defense-assistance program.

ITEM NO. 34.—*Schuylkill River above Fairmount Dam, Pa.*

Total estimated Federal cost	$12, 574, 000
Allotments to date	400, 000
Additional to complete	12, 174, 000
Approved budget estimate	1, 900, 000
Amount allowed by House	1, 000, 000
Restoration requested	900, 000

EFFECT OF REDUCTION

Proposed allocation of 1952 funds for item 4 ($690,000) will complete all work on the pool farthest upstream.

The remaining funds ($310,000) would be insufficient to economically initiate work on item 2, which is the next pool downstream, and it will be necessary to apply those funds for additional work on disposal areas needed for the dredging of the last pool.

The reduction will delay the completion on the total project for 1 year.

JUSTIFICATION FOR RESTORATION

Numerous industries and the naval base located along the lower reaches of Schuylkill River are seriously affected by culm deposits from above Fairmount Dam, causing shoals in front of their wharves, particularly during freshets. Plants using water from Schuylkill River for domestic and industrial purposes also experience considerable trouble by clogging of their intakes. Early completion of the project would eliminate these difficulties. A number of the industries, including oil refineries, ore- and grain-loading piers, as well as the naval base, are highly important to the defense program.

The removal of the culm deposits in the river above Fairmount Dam to Norristown will substantially reduce the dredging requirements in the tidal section of the river as well as effectuate the benefits from the $35,000,000 expenditure by the Commonwealth in removing the deposits from the river above Norristown. If the culm deposits in the river between Norristown and Philadelphia are not removed, a substantial portion of these deposits can be expected to move into the navigation channels during freshets. Recently because of this condition it was necessary to redredge the 26- and 22-foot project channels above Passyunk Avenue Bridge within 3 months after the initial maintenance contract was completed. In the section below the bridge, 4 to 5 months' dredging by a Government hopper dredge is necessary to provide minimum navigating depths. In addition, constant dredging operations by municipal authorities and private interests are required to keep slips and berthing areas open.

It is considered that adequate maintenance of the Schuylkill River Channel is important to the defense effort and the national economy, and that any reduction in the maintenance load by removing the material before it can move into the navigation channels results in operation economies.

Restoration of the $900,000 cut made by the House will obviate the necessity for delaying completion of this project by 1 year.

CURRENT EXPENSES

The appropriation for current expenses includes all maintenance and operation and care of river and harbor channels, locks and dams and allied structures, the investigations of navigation projects assigned by Congress, and the administration of the Federal navigation laws. Data and justifications for the activities included under "Current expenses" are contained in the following summary and individual justifications:

Summary of current expenses

	Approved budget estimate	Allocation by Corps of Engineers within House allowance	Restoration requested
1. Operation and maintenance of projects:			
(a) Channels and harbors	$41,070,000	$39,300,000	$1,770,000
(b) Operation and care of locks, dams, and canals	20,000,000	19,000,000	1,000,000
(c) Operation and care of multiple-purpose projects	1,600,000	1,600,000	----------
2. Operation and maintenance, special:			
(a) Removing sunken vessels and other obstructions to navigation	500,000	500,000	----------
(b) Protecting, clearing, straightening channels of navigable waters not specifically authorized by Congress (work under sec. 3, River and Harbor Act, Mar. 2, 1945)	300,000	----------	300,000
3. Examinations and surveys:			
(a) River and harbor studies	1,200,000	[1]	1,200,000
(b) Beach-erosion studies	150,000	150,000	----------
(c) Survey of northern and northwestern lakes	300,000	[1]	300,000
(d) Stream-gaging studies	120,000	120,000	----------
(e) Fish and wildlife studies [2]	187,500	1,600,000	140,000
4. Regulation:			
(a) Regulation of hydraulic mining on Sacramento and San Joaquin Rivers (California Debris Commission)	10,000	10,000	----------
(b) Prevention of illegal deposits in New York Harbor	40,000	40,000	----------
(c) Miscellaneous inspections, investigations, issuance of permits, harbor lines, commercial statistics, etc. (contingencies)	1,275,000	1,275,000	----------
5. Administration:			
(a) Salaries, Office Chief of Engineers (allotment roll)	670,000	595,000	75,000
(b) Expenses, River and Harbor Board	400,000	360,000	40,000
(c) Expenses, Beach Erosion Board	100,000	90,000	10,000
Total	68,282,500	65,000,000	4,835,000

[1] Specifically deleted by House.

[2] House did not specify breakdown between "Construction" and "Studies," whereas President's budget specifies $1,552,500 for "Construction" and $187,500 for "Studies," a total of $1,740,000. Accordingly, the $1,552,500 allowed for construction by the Fish and Widlife Service should be carried under "Major capital outlay."

Restoration of the amount of $4,835,000 is requested under current expenses. This amount represents full restoration of the reduction by the House as follows:

President's budget:	
Current expenses (including $187,500 transfer to Fish and Wildlife Service for studies)	$68,282,500
Major capital outlay: Transfer to Fish and Wildlife Service for construction on lower Columbia	1,552,500
Total	69,835,000
House allowance, which includes $1,600,000 transfer to Fish and Wildlife Service for both construction and studies	65,000,000
Restoration requested	4,835,000

1 (a). Operation and maintenance of channel and harbor projects

The amount of $41,070,000 required for maintenance of river and harbor navigation projects, as submitted by the Bureau of the Budget to Congress, was initially subjected to careful review by this office and by the Bureau of the Budget to provide for essential needs of commerce at only the deeper draft harbors and major inland waterways. This is not a sufficient amount to provide for the essential needs for commerce on the shallower draft channels. For example, provision has been made for maintenance of only the deeper draft harbors and major inland waterways. No provision has been made for maintenance of many harbors and waterways used by commercial navigation which are vitally important to the local economies, nor for harbors or waterways used primarily by pleasure craft. Likewise, deferral of practically all major repairs to jetties and breakwaters is necessary to keep within the approved budget estimates.

Even if the full amount of the budget estimate is provided, a substantial increase in the backlog of maintenance work which has already developed from

past insufficient appropriations for this purpose will result. Failure to accomplish this maintenance when needed will result in the continuing deterioration of some channels, breakwaters, jetties, and other harbor works which will add considerably to the difficulty already being experienced by commercial navigation interests, and will substantially increase the amount of funds required for future restoration.

An additional unforeseen maintenance requirement has developed since the submittal of the budget estimates as a result of the construction of the new plant of the Fairless division, United States Steel Corp., at Morrisville, Pa., the operation of which will require, at the minimum, the full restoration of the 25-foot channel on the Delaware River from Philadelphia to Trenton, at an estimated cost of $1,300,000. These added costs are of urgent priority and must be met from the funds provided for the maintenance of river and harbor navigation projects. In addition, it is already known that funds proposed for the removal of wrecks and obstruction in major channels will not be sufficient to meet actual costs for this purpose, requiring that maintenance funds be utilized instead. No provision has been made in the approved budget estimate for essential contingencies of this nature, the provision of which will result in further reduction in urgently required maintenance work.

For the past 4 years, funds made available for the maintenance of channels and harbor projects have averaged $48,700,000 per year. Under this level of maintenance, the backlog of deferred maintenance mentioned above has developed The approved budget estimate for fiscal year 1952, $41,070,000, has been further reduced to $39,300,000 to meet the reduction prescribed by the House. At the same time, unforeseen demands against these funds, as noted above, have increased the requirements by $2,000,000 to $3,000,000. The inevitable result will be still further deferrals of essential maintenance on major harbors and channels. Continuation of this policy will cripple the water-transportation industry which is vital to the national defense and the economy of the areas served. It is most important that, at the minimum, the proposed reduction be restored and that the full approved budget estimate of $41,070,000 be allowed.

1 (b). Operation and care of locks, dams, and canals

The appropriation for river and harbor current expenses, as passed by the House, will necessitate a reduction of $1,000,000 below the budget estimate of $20,000,000 for operation and care of locks, dams, and canals. This reduced amount will not permit operation and maintenance of the actively used 258 locks and 199 navigation dams on the extensive inland waterway systems within the minimum standards considered necessary to provide adequately for the increasing commercial traffic and to operate and maintain efficiently the project works.

For this category of current expense, the actual obligations for the fiscal year 1950 were $20,209,054 and the estimated obligations for the fiscal year 1951 exceed $20,000,000. Therefore, the budget estimate for 1952 was held to the requirements of the preceding fiscal year, notwithstanding the increase in costs of labor and materials. The budget estimate of $20,000,000 is the very minimum for this category of current expense and provides for practically no major reconstruction or improvement of existing structures, and for substantial curtailment of maintenance and care of project works and property generally. Any further deferment of ordinary maintenance as would be required by the reduction below the budget estimate will inevitably result in the accumulation of a greater backlog of such work and may result in the complete impairment or loss of a project. It will definitely result in larger repair costs in the future. For example, needed repairs to a lock gate now at nominal cost would obviate the necessity of costly complete replacement of the gate after it has gone beyond repair.

In order that sufficient funds will be available within the budget estimate for operation, repair, and maintenance of canalized waterways of importance to commercial shipping, the Chief of Engineers is suspending locking service and maintenance of a group of 58 locks and 24 dams that are obsolescent, have served their intended purpose, and where present commerce is insignificant. Where practicable, the Federal property and responsibility for the discontinued facilities will be transferred to State or local agencies. In addition to the economies thus being effected, each request for the use of operating and care funds is now, and will continue to be, subjected to careful review to insure that the work is absolutely necessary to meet the present needs of commercial navigation.

1 (c). Operation and care of multiple-purpose projects

In the application of the House reduction, no change was made in the amount allocated to this item of current expense. Our actual costs for the operation of the Bonneville and Fort Peck multiple-purpose projects during fiscal year 1950

exceeded $1,500,000. In view of the importance of these projects, the addition of a third generating unit at Fort Peck in October 1951, rising labor costs, and additional security guards and other security measures, the amount provided for this feature cannot be reduced without incurring indefensible risks in the operation and maintenance of these projects.

2 (a). Removing sunken vessels and other obstructions to navigation

In the application of the House reduction, no change is proposed in the amount of $500,000 submitted for removing sunken vessels and other obstructions to navigation. The Government is legally responsible for the removal of those wrecks abandoned by the owners in navigable waters which are obstructions to navigation. In 1951, the amount of $500,000 was budgeted for this purpose. Actual expenditures for the past 5 years have averaged in excess of $700,000. Deficiencies have been met from funds made available for the maintenance of channels and harbors. Disregarding the smaller wrecks and the potentiality wrecks which have not yet occurred, considerably more than the full amount proposed will be required for the removal of two wrecks which recently occurred. In August 1950 the *Benevolence* sank off the entrance to San Francisco Harbor. Its removal is estimated to cost between $500,000 and $1,000,000. In May 1951 the *Arizona Sword* sank in the Cape Cod Canal. Its removal is estimated to cost $250,000. The removal of both of these wrecks at an early date is essential to the safety of commercial navigation. Additional funds will also be required for the removal of other wrecks as they occur. The deficiency in funds appropriated for this purpose must be met from funds made available for the maintenance of harbor and channel projects. These latter funds have already been reduced to the point where essential maintenance must be deferred. In view of the critical nature of the work proposed for removing sunken vessels and other obstructions to navigation, and the known deficiency of the amount proposed, it is considered vital that the full amount of $500,000 proposed under this title be retained.

2 (b). Section 3 of River and Harbor Act, approved March 2, 1945

Authority for the expenditure of funds not to exceed $300,000 per annum for emergency channel clearing projects in the interest of navigation was authorized in the River and Harbor Act, approved March 2, 1945.

This authorization was intended to provide for emergency clearing in those channels for which no navigation improvement authorization already existed. The entire amount proposed, $300,000, has been deleted in the application of the House reduction as being of less urgency than the maintenance of those major channels for which authorized projects already exist. This deletion has been made mainly because the maintenance of the major harbors and channels is essential to the maintenance of commerce important to the national defense, and funds proposed for these latter purposes are insufficient to meet the current requirements.

In spite of the deletion of this $300,000 proposed appropriation it is considered that the full amount should be restored in order to permit the emergency clearing of those channels for which obstructions to essential commercial traffic develop unexpectedly and for which the normal procedures for the authorization of a project would be too slow to meet the essential requirements of commercial traffic.

4 (a). Regulation of hydraulic mining on the Sacramento and San Joaquin Rivers (California Debris Commission)

In the application of the House reduction no change is proposed in the $10,000 item for regulation of hydraulic mining on the Sacramento and San Joaquin Rivers (California Debris Commission). These funds are utilized by the California Debris Commission for the purpose of investigating and issuing permits to parties proposing to engage in hydraulic mining where the residual flow returns to the Sacramento and San Joaquin Rivers. The performance of this service is essential to administer the laws which were enacted for the purpose of materially reducing the deposition of sediment from this type of mining. The funds required are repaid many times in the reduction in the amount of dredging required to maintain the navigable depths in the Sacramento-San Joaquin Rivers.

4 (b). Prevention of illegal deposits in the New York Harbor

The laws enacted for the preservation of the tidal waters of New York Harbor, its adjacent or tributary waters, and the waters of Long Island Sound are administered by the supervisor of New York Harbor, a line officer of the Navy under

the direction of the Secretary of the Army. The Supervisor is charged under the laws with the duties of preventing any obstructive or injurious deposits in the channels of the harbor. Supervision is exercise by means of inspectors and patrols. Salaries, wages, and maintenance and operation of the patrol vessels account for the cost of the work, estimated for fiscal year 1952 at $400,000. No reduction can be made in this amount without laying up one or more patrol vessels resulting in a curtailment of this service critical to shipping in New York Harbor. In view of the defense importance of the port of New York such curtailment is considered impractical and is not recommended.

4 (c). Miscellaneous inspections, investigation, issuance of permits, harbor lines, commercial statistics, etc. (contingencies)

The budget estimate of $1,275,000 for river and harbor contigencies is the very minimum amount required for this feature.

Funds appropriated for contingencies are principally utilized in performing miscellaneous functions required by law, for which no specific requests for individual appropriations are made. These functions include, as specifically authorized by Congress, the collection and compilation of statistics on waterborne domestic commerce of the United States and their publication in the annual report together with statistics on waterborne foreigh commerce of the waterways and harbors of the United States and its possessions. Such statistics are necessary in order to obtain economy of expenditures through analyses of benefits deriving from completed and proposed work, and through determination of the degree of maintenance required for completed projects. The Corps of Engineers compiles the only statistics on domestic waterborne commerce and publishes the only report on all waterborne commerce of the United States.

Pursuant to acts of Congress, the Corps of Engineers performs various regulatory functions and performs certain activities for the purpose of protecting and preserving the navigable waters of the United States. These activities include control over obstructions to navigation including existing and proposed bridges by the required inspections and issuance of permits. The contingency funds also defray the United States share of the costs of the several international commissions and boards having jurisdiction over the boundary waters.

In connection with the prosecution of the river and harbor program, special field investigations and reports are required which are not directly related specifically to the construction, operation, or maintenance of projects nor to authorized investigations, and the cost thereof must be charged to the contingency account.

5 (a). Salaries, Office, Chief of Engineers

Justification for restoration of the river and harbor portion of Office, Chief of Engineers, salaries is contained in the over-all justification set forth on pages 1 and 2 of this reclama.

5 (b). Expenses, River and Harbor Board

Restoration of the $40,000 of the House cut on current expenses applied to the expenses of the River and Harbor Board is requested. The full budget estimate of $400,000 represents a substantial reduction of the actual expense of the Board incurred in 1950 amounting to in excess of $480,000. It has been determined that $400,000 is the minimum amount required to meet the present expenses of the River and Harbor Board which is responsible by law for the review of all reports of authorized examinations and surveys of river and harbor and flood-control projects and for the printing of port series reports and documents. The River and Harbor Board is the only Federal agency publishing complete statistics of waterborne commerce of the United States and its possessions. These figures are used extensively by other Federal agencies as well as transportation interests, and adequate appropriations should be provided. Full restoration of the House cut is requested.

5 (c). Expenses, Beach Erosion Board

Restoration of the $10,000 of the House cut on current expenses applied to the expenses of the Beach Erosion Board is requested. The $100,000 requested in the approved budget estimate for the expenses of the Beach Erosion Board represents a substantial cut from the actual expenses of this Board during fiscal year 1950 when in excess of $138,000 was required for this purpose. The $100,000 requested in the approved budget estimate is required for the administrative expenses involved and for the supervision of technical investigations leading to a determination of the most suitable methods for protection and restoration of beaches. Restoration of the full House cut is requested.

JUSTIFICATION FOR RESTORATION—FLOOD CONTROL, GENERAL

ITEM NO. 1.—*Blakely Mountain Dam, Ark.*

Total estimated Federal cost	$32, 675, 000
Allotments to date	11, 850, 000
Additional to comple e	20, 825, 000
Approved budget estimate	6, 000, 000
Amount allowed by House	5, 700, 000
Restoration requested	300, 000

EFFECT OF REDUCTION

Item 9. Powerhouse and power equipment

The reduction of $300,000 will reduce the allocation for the manufacture of the turbines and generators from $555,500 to $255,500. This is the only item that can be reduced because the land acquisition, relocations, and clearing must be prosecuted to the full extent of the proposed 1952 funds in order that the work will stay abreast of the rising pool occasioned by construction of the dam. The dam must be brought up to elevation 510 during 1952 to preclude the danger of embankment failure by overtopping with resultant great loss of work in place and possible loss of life and property below the dam. The reduction in funds for manufacture of the turbines and generators will retard work on these continuing contracts in 1952 and will delay final completion of this equipment approximately 3 months.

The estimated 3-month delay in the manufacture of the turbines and generators will result in a corresponding 3-month delay in completion of the powerhouse and generation of power.

JUSTIFICATION FOR RESTORATION

This project is located in the rapidly developing area of Arkansas where 95 percent of the Nation's domestic bauxite (aluminum ore) is mined and where the aluminum reduction plants are located. The Blakely Mountain project will be connected to the Arkansas Power & Light Co. system, a part of the ALM pool (Arkansas, Louisiana, and Mississippi power and light companies) which is interconnected with the Tennessee Valley Authority and other companies. The Blakely Mountain project will have an installed capacity of 75,000 kilowatts. The estimated average annual generation of this project is 131,500,000 kilowatt-hours as compared to the 1949 total load of 3,270,000,000 kilowatt-hours for the entire ALM pool. It is planned that this project will operate closely in combination with the Carpenter and Remmel hydroelectric plants of the Arkansas Power & Light Co., located downstream on the Ouachita River. The major industries served by the system are aluminum reduction plants, paper mills, cooperage and veneer plants, oil refiners, and plants for production of ammonia, nitrates, ceramics, and cottonseed products. Also, in the general area are the large Army hospital at Hot Springs, Ark., naval ammunition depot near Camden, Ark., which is presently being expanded, and the munitions plant at Pine Bluff, Ark. The power which would be lost by a 3-month delay in completing the project is estimated to be 33,000,000 kilowatt-hours with a value of $400,000.

ITEM NO. 13.—*Mansfield Hollow Reservoir, Conn.*

Total estimated Federal cost	$7, 550, 000
Allotments to date	4, 010, 000
Additional to complete	3, 540, 000
Approved budget estimate	3, 000, 000
Amount allowed by House	2, 500, 000
Restoration requested	500, 000

EFFECT OF REDUCTION

Item 4. Highway relocations

Reduction in allocation for this item will result in deferment of relocation of Route 89, a State highway connecting U. S. Routes 6 and 44, two of southern New England's most important highways.

Item 5. Airport runway relocation

Reduction in allocation for this work will result in deferment of extension of runway at Windham Airport.

Deferment of items 4 and 5 will result in curtailment of operation of the completed reservoir in order to avoid inundation of Route 89 and disruption of established traffic patterns; prevent complete utilization of the planned storage capacity of the reservoir and decrease the amount of protection provided for downstream damage centers.

JUSTIFICATION FOR RESTORATION

Restoration of the cut made by the House is required to avoid curtailment of operation of the completed reservoir and to consummate an agreement for extension of runway at Windham Airport to replace runway which is presently cut off by construction operations. If these items are deferred, increasing price levels will be reflected in higher costs for final agreements.

ITEM NO. 15. *Clark Hill Reservoir, Ga, and S. C.*

Total estimated Federal cost	$78, 400, 000
Allotments to date	51, 699, 000
Additional to complete	26, 701, 000
Approved budget estimate	18, 300, 000
Amount allowed by House	18, 000, 000
Restoration requested	300, 000

EFFECT OF REDUCTION

The proposed reduction in the amount of $300,000 would of necessity have to be applied to item No. 7 "Powerhouse." Such a reduction may result in failure to meet the1 scheduled power production date as well as completion of the entire project.

A reduction of $300,000 might disrupt the carefully planned schedule for closure and would seriously disrupt that schedule for initial and ultimate power production. The major construction features of work, among which is the powerhouse, are being prosecuted under continuing contracts. The proposed reduction would necessitate a slow-down and could cause a drastic revision in the schedules for construction and long-range delivery of materials prepared by the contractors. A delay of not less than 3 months in the initial production of power and a like delay in completion of the entire project might be expected.

JUSTIFICATION FOR RESTORATION

Commitments have been made by the Southeastern Power Administration on the basis of present planned power production at Clark Hill for deliveries of power to military establishments, defense activities and agricultural interests. The proposed reduction in the amount of $300,000 would, of necessity, have to be applied to item No. 7 "Powerhouse." Such major features of work as items 3, 4 and 5 must be completed expeditiously to permit closure during April 1952 as scheduled. The first power unit is scheduled to be placed on the line in October 1952. To meet this schedule, it is imperative that items 8, 9, and 11, which are being performed under continuing contracts, be continued during fiscal year 1952 in an orderly manner without slowdown. Any slow-down in the scheduled completion of the powerhouse, as would be necessary in the event of a $300,000 reduction in funds, could result in an estimated delay of three or more months in the initial generation of power and would slow up completion of the entire project.

The restoration of the budget estimate is essential in order to permit the early and planned production of power which will be consumed in an area now deficient in power, and which is rapidly developing industrially in the interest of national defense.

ITEM NO. 39.—*Buggs Island Reservoir, Va. and N. C.*

Total estimated Federal cost	$88, 840, 000
Allotments to date	60, 400, 000
Additional to complete	28, 440, 000
Approved budget estimate	17, 000, 000
Amount allowed by House	16, 000, 000
Restoration requested	1, 000, 000

EFFECT OF REDUCTION

Item 6, "Relocations": The entire reduction of $1,000,000 made by the House has been applied to relocations in the reservoir area. This was done because relocations is the only phase of the project on which a substantial volume of work remains to be initiated. Highway relocations constitute the major part of this item.

Delay in the accomplishment of relocations in the reservoir area will cause a similar delay in the commencement of reservoir filling and the use of the project for the production of power. The dam structure is now nearly completed and can be used to provide flood control. However, its effectiveness for this purpose is limited until the relocations are completed.

JUSTIFICATION FOR RESTORATION

In view of the magnitude of the project and the advanced stage of construction, it is highly desirable that the work be prosecuted at the scheduled rate in order that large flood-control and power benefits will be realized as soon as possible, and the urgent need for additional power will be supplied. It is essential that the reduction of $1,000,000 made by the House be restored to provide benefits from the project as soon as the dam is completed.

ITEM NO. 48.—*Conemaugh River Reservoir, Pa.*

Total estimated Federal cost	$47, 500, 000
Allotments to date	35, 168, 700
Additional to complete	12, 331, 300
Approved budget estimate	10, 000, 000
Amount allowed by House	8, 400, 000
Restoration requested	1, 600, 000

EFFECT OF REDUCTION

Item 4. Clearing reservoir area

Only a limited amount of clearing can be completed with the amount allowed by the House for fiscal year 1952. The consequence of delaying clearing operations is the possibility of collecting large quantities of debris in back of the dam in the event of an unavoidable impoundment of water in the portion of the reservoir lying below the fixed crest of the spillway. Such debris might have the effect of clogging the intakes and thus limiting their discharge capacity and increasing the height of impoundment behind the dam. Such debris jams are also often very difficult and expensive to remove and until removed interfere with reservoir operation and aggravate the unavoidable impoundment problem.

Item 5. Appurtenances

The reduction in funds will limit progress on the construction of the crest gates and will make it impractical to complete the gate installation by the end of calendar year 1952 as scheduled. Delay in this item will of course make it impractical to utilize the storage capacity above the fixed crest (approximately 54 percent of total) during the winter-spring flood season of 1953. In view of the difficulties already attending delivery of materials for steel fabrication because of the priority of defense work it would be most advantageous to award a contract at the earliest practicable date with sufficient funds available for payments thereunder to encourage all reasonable progress to the end that gates will be available for use when progress on work in reservoir permits.

Item 10. Railroad relocations

The amount allowed by the House will permit only a very limited amount of work to be accomplished in connection with the alterations and relocation of the various branches of the Pennsylvania Railroad. This work has to be completed before the project can be utilized to the extent for which it is designed.

The recommended reduction of construction funds for fiscal year 1952 will result in a delay of at least 1 year in completion of the project to where it can provide design flood protection.

JUSTIFICATION FOR RESTORATION

The Conemaugh River Reservoir, Pa., flood-control project should be completed as rapidly as possible to provide flood protection to the highly industrialized lower Allegheny River Valley, Pittsburgh, and upper Ohio River Valley areas. It is

the key dam in the flood-control plan for the protection of Pittsburgh and the upper Ohio River Valley. It will afford flood protection in the Conemaugh-Kiskiminetas River Valley below the dam site which contains the so-called Kiskiminetas flood damage district including Saltsburg, Avonmore, Apollo, Vandergrift, Hyde Park, and Leechburg, as well as several smaller communities affecting about 35,000 people; the Allegheny River Valley below the mouth of the Kiskiminetas River which contains the New Kensington and part of the Metropolitan Pittsburgh flood damage district affecting about 420,000 people; the lower Monongahela River Valley and the upper Ohio River Valley which contains another part of the metropolitan Pittsburgh and the Wheeling flood-damage districts affecting about 920,000 people. All the above damage districts contain extensive industries, the major ones of which are iron, steel, aluminum, electric power and the manufacture of electrical equipment, all of which are essential commodities in the prosecution of the national defense effort. Over 120,000 employees are engaged in the manufacture of defense products by these industries. Any interruption to production in the aforementioned areas by floods would have an adverse effect on the defense effort throughout the country. Reduction in the proposed construction funds for fiscal year 1952 will definitely postpone the flood protection to be ultimately furnished by the Conemaugh project to this vital area for another year. It is essential that the full amount of the budget estimate be appropriated to avoid the delay of flood protection to this vital area.

ITEM NO. 49.—*East Branch Clarion River Reservoir, Pa.*

Total estimated Federal cost	$9,612,000
Allotments to date	6,688,600
Additional to complete	2,923,400
Approved budget estimate	2,100,000
Amount allowed by House	2,000,000
Restoration requested	100,000

EFFECT OF REDUCTION

Item 4. Clearing

The reduced amount allowed by the House will delay the initiation of the clearing of the reservoir area until late in fiscal year 1952. The consequence of delaying clearing operations is the possibility of collecting large quantities of debris in back of the dam and outlet works in the event of an unavoidable impoundment of water. Such debris might have the effect of clogging the outlet works and thus limiting the discharge capacity and increasing the height of impoundment behind the dam. Such debris jams are often difficult and expensive to remove and until removed interfere with reservoir operations to the extent that the project cannot be placed in full service, especially as pertaining to low-water regulation.

Because of the proposed reduction in funds for fiscal year 1952, the clearing operations cannot be advanced to a point where enough water can be impounded during the spring of 1952 to allow any use of the reservoir for low-water regulation during that summer and early fall as scheduled. Such use cannot be achieved until approximately 1 year later.

JUSTIFICATION FOR RESTORATION

The construction of the embankment and spillway has progressed slightly faster than originally anticipated in July 1949, the date work started and therefore the funds requested to continue this contract during fiscal year 1952 cannot be reduced without slowing down the work.

Clearing operations must keep pace with the construction of the dam if the project is to provide the benefits for which it was designed at the earliest practical date. The project when completed will afford flood protection to Johnsonburg, Ridgway, and the upper Clarion River Valley. The principal industries in these localities engaged in work essential to the national defense effort employed approximately 3,300 employees during 1947 producing paper and byproducts, carbon products, lumber, electrical machinery, rubber products, and electric power. The discharge regulation from the reservoir when completed will increase the hydroelectric power available at the existing plant downstream from the East Branch Dam site.

ITEM NO. 50.—*Williamsport, Pa.*

Total estimated Federal cost	$15,000,000
Allotments to date	9,674,700
Additional to complete	5,325,300
Approved budget estimate	775,000
Amount allowed by House	
Restoration requested	775,000

EFFECT OF REDUCTION

Elimination of funds for the Williamsport project will result in suspension of operations which commenced over 10 years ago and have progressed by stages to construction of section I, the major portion of section III, and to completion of contract plans and specifications for a substantial portion of the remaining section II.

It will delay closure of the one remaining gap in the line of protection in section III and interfere with the turning over of that section to local interests for maintenance. It will delay construction of section II, delay the over-all completion date for the entire project, currently scheduled for 1954, and leave vital industries unprotected for a longer period at a time when maximum output is of vital interest to the Nation.

JUSTIFICATION FOR RESTORATION

The amount requested is to complete construction of the closure gap in the line of protection in the Borough of South Williamsport (section III) and secure the benefit of a useful unit which can be turned over to local interests, and to further the completion of the entire project by constructing a substantial segment of the flood-control works required for the protection of the highly developed Newberry area, the remaining section of the project, which contains important industrial installations, including Sweet Steel Co., Armour Leather Co., Keystone Glue Co., Lundy Lumber Co., flour mills, weaving mills, and large interchange yards of the New York Central, Pennsylvania, and Reading Railroads in addition to a large area whose residents are employed in the important defense industries located in other sections of Williamsport. The major industries in the Newberry area are currently reported to have a production rate of $30,000,000 annually. The railroad yards, which are the largest in this region, handle a daily average of 1,300 cars. The May 1946 flood demonstrated the vulnerability of this highly developed area, and it is considered necessary that construction of this protection advance without further delay in order to eliminate the flood hazard which includes risk of higher stages by the channel confinement through completed sections of the project. The work to be undertaken with funds budgeted for fiscal year 1952 consists of levee construction which does not require critical materials.

Since the March 1936 flood, which led to the project authorization, the Newberry area alone has been subjected to five damaging floods resulting in flood damages totaling over $2.5 million, all within a 10-year period. If the 1936 flood were included, the total would be over $4 million.

ITEM NO. 56.—*Memphis, Wolf River, and Nonconnah Creek, Tenn.*

Total estimated Federal cost	$13,430,000
Allotments to date	7,788,700
Additional to complete	5,641,300
Approved budget estimate	750,000
Amount allowed by House	160,000
Restoration requested	590,000

EFFECT OF REDUCTION

Item 2. Section 1, floodwalls and levee (by continuing contract)

The reduction of $590,000 in the approved budget estimate will eliminate initiation of construction of section 1C floodwall in fiscal year 1952. Without the construction of section 1C floodwall, Marble Bayou, and Bayou Gayoso pumping stations will have no flood protection from stages produced by the project flood. Completion of section 1C floodwall will be delayed 1 year.

The 1-year delay in construction of section 1C floodwall will correspondingly delay completion of the entire project by 1 year. In addition the Marble Bayou and Bayou Gayoso pumping stations will be subject to floodings as well as several industries producing material essential to the national defense during the present emergency. In case of a major flood, emergency work may have to be provided to prevent damage to the Marble Bayou and Bayou Gayoso pumping stations.

JUSTIFICATION OF RESTORATION

The restoration of the reduction will allow completion of the project 1 year earlier and will provide for the initiation of construction on section 1C floodwall. This floodwall with tie-in levees will provide flood protection to 620 acres of the low-lying business and industrial section of the city of Memphis. This area has several industries producing material essential to the national defense during the current emergency which will be protected from the project flood due to initiation of construction of section 1C floodwall.

ITEM NO. 1.—*Operation and maintenance*

Approved budget estimate	$5,300,000
Amount allowed by House	5,260,000
Restoration requested	40,000

The budget estimate of $5,300,000 of current expense, "Flood control, general," funds for maintenance and operation of flood-control projects is the very minimum required for this category of work. Much of this cost is fixed operating expenses, such as the payroll of the dam tenders, and these costs have been held to the irreducible minimum. In 1952 the need for flood-control maintenance funds will be greater because eight new projects adding 260,000 kilowatts of capacity will require the first maintenance funds. In addition, certain flood-control reservoirs and local protection projects on which maintenance was deferred or drastically curtailed this year will require larger amounts. In 1952 there will be a total of 81 flood-control and multiple-purpose dams and reservoirs in operation throughout the United States. The construction of these projects imposes upon the Federal Government the responsibility for the maintenance to the standards necessary to prevent damage to or loss of the structures with consequent loss of life and property.

Since the amount requested for maintenance is the minimum required, it would be necessary to make the reduction of $40,000 below the budget estimate for current expenses, as passed by the House, by deferring the inspection of completed works. It is important that periodic inspections be made of local flood-protection works constructed with Federal funds and turned over to local interests for maintenance under regulations prescribed by the Secretary of the Army as provided by law. The purpose of these inspections is to point out essential maintenance work which should be taken by local interests to prevent deterioration of the structures and to insure effectiveness of the Federal investment in these works. Our experience shows that the local authorities responsible for such maintenance need the technical advice we are in a position to give them through periodic inspections. The relatively small costs of these inspections are repaid many times by the benefits accruing to the people whose lands are protected by the levees and flood walls as long as the structures are adequately maintained and ready to withstand the floodwaters. The corps should therefore have available the full budgeted amount of $5,300,000 for carrying out the vitally important maintenance and operation and inspection work on our completed flood-control projects.

ITEM NO. 3.—*Administration (salaries, Office, Chief of Engineers)*

Approved budget estimate	$840,000
Amount allowed by House	740,000
Restoration requested	100,000

Justification for restoration of the "Flood control, general" portion of Office, Chief of Engineers salaries is contained in the over-all justification set forth on pages 1 and 2 of this reclama.

MISCELLANEOUS CIVIL WORKS—MAINTENANCE AND OPERATION OF CERTAIN FEDERAL WATER MAINS OUTSIDE THE DISTRICT OF COLUMBIA

(Estimate $16,000; bill as passed the House $12,000)

(House hearings, p. 621)

(P. 9, line 7)

(1) Page 9, line 7, strike out "$12,000" and insert in lieu thereof "$16,000", the estimate or an increase of $4,000 in the House bill.

JUSTIFICATION

(1) This amendment would restore $4,000, the amount deleted from the estimate by the House and would be applied by activity and object of expenditure as follows:

By activity

Project	Amount in bill	Proposed amendment	Total request
Maintenance and operation of certain Federal water mains outside the District of Columbia	$12,000	$4,000	$16,000

By object

Object	Amount in bill	Proposed amendment	Total request
01 Personal services, civilian	$500	0	$500
07 Other contractual services	9,500	$4,000	13,500
08 Supplies and material	2,000	0	2,000
Total direct obligations	12,000	4,000	16,000

JUSTIFICATION FOR RESTORATION—MAINTENANCE AND OPERATION, CERTAIN FEDERAL WATER MAINS OUTSIDE THE DISTRICT OF COLUMBIA

Approved budget estimate	$16,000
House allowance	12,000
Restoration requested	4,000

This appropriation is required for the maintenance and servicing of water lines connecting the District of Columbia water supply system with Federal buildings and installations in Virginia and Maryland.

The system embraces 28.3 miles of water mains of which more than one-half is 16 inches in diameter. The system serves Federal installations such as the Army Map Service, the Pentagon, Fort Myer, Arlington Cemetery, the Airport, the Navy Annex and its adjacent Marine and Navy barracks, Andrews Airfield, and Building T–7, which houses the Office of the Chief of Engineers. The system includes 115 fire hydrants and 750 valves or meters. The regular annual appropriation to and including the fiscal year 1950 was $12,000; for fiscal year 1951, $15,000 was made available. Since the maintenance of these water mains under a civil appropriation was inaugurated in 1945, there have been 4 or 5 wage increases and materials have increased as much as 30 percent. Repair of breaks or interruptions to service cost as much as $1,500 to $1,800 each. In view of the many and important buildings and services supplied, it is highly desirable that the full amount of the House reduction of $4,000 be restored thus making $16,000 available during the fiscal year 1952.

NIAGARA POWER DEVELOPMENT

(Estimate $2,000,000; bill as passed the House $–0–)

(House hearings, p. 625)

(p. 9, line 7)

(1) Page 9, after line 7, insert the following: "For engineering and economic investivations, pending authorization for construction, of projects for development and utilization for power purposes of the waters of the Niagara River, allocated to the United States under the treaty between the United States of America and Canada, ratified by the United States Senate on October 9, 1950, $2,000,000, to remain available until expended."

JUSTIFICATION

(1) This amendment would restore $2,000,000, the amount deleted from the estimate by the House and would be applied by activity and object of expenditure as follows:

By activity

Project	Amount in bill	Proposed amendment	Total request
Surveys and investigations, Niagara Power Development	0	$2,000,000	$2,000,000

By object

Object	Amount in bill	Proposed amendment	Total request
01 Personal services, civilian	0	$145,900	$145,900
02 Travel	0	1,500	1,500
03 Transportation of things	0	300	300
04 Communication services	0	300	300
05 Rents and utility services	0	500	500
06 Printing and reproduction	0	280	280
07 Other contractual services	0	1,648,150	1,648,150
08 Supplies and equipment	0	1,250	1,250
09 Equipment	0	13,000	13,000
10 Lands and structures	0	188,820	188,820
Total direct obligations	0	2,000,000	2,000,000

Quinby Creek, Accomac County, Va.

Total estimated Federal cost	$116,000
Allotments to date	
Amount that could be expended during fiscal year 1952	116,000

Authorization.—River and Harbor Act of 1950.

Location and description. The village of Quinby, Va., is located on the western shore of Upshurs or Cats Bay on the oceanward side of the eastern shore of Virginia, 32 miles north of Cape Charles, Va. Quinby Creek, at present, is a shallow, natural channel across the mud flats between Quinby Landing and deep water in Upshurs Bay. The authorized project, as contained in House Document No. 241, Eighty-first Congress, first session provides for a channel 8 feet deep at mean low water and 80 feet wide from that depth in Upshurs Bay to within 600 feet of Quinby Landing, thence 60 feet wide to Quinby Landing, a total length of about 6,900 feet; and a turning and mooring basin 8 feet deep and 200 feet wide, and 400 feet long at the head of the 60-foot channel and opposite the proposed public terminal at Quinby Landing.

Status.—No work has been done on this project. The controlling depth across the mud flats at the time of the survey in 1949 was less than 1 foot at mean low water, with a mean range of tide of 4.4 feet.

Proposed operations—fiscal year 1952. With an expenditure of $116,000 the authorized project could be completed during the 1952 fiscal year.

Justification.—The authorized project provided for an adequate and safe entrance channel, mooring basin and harbor of refuge, and would facilitate the safe movement to and from Quinby of small tankers, freight boats, seafood harvesting boats and charter fishing boats. Principal commerce of Quinby includes seafood (oysters, clams, crabs, scallops, and fish) coal, lime, barrel staves, fertilizers and farm products. The benefit to cost ratio is 4.6.

OBSOLESCENT CANALIZED WATERWAYS

Chairman McKellar. We have been furnished by the Corps of Engineers a lengthy statement with reference to obsolescent canalized waterways, about which we had some testimony. I shall, without objection, insert the report in the hearings at this point.

(The matter referred to is as follows:)

In order to achieve further economies in civil works maintenance expenditures, the cessation of lock operations on waterways that have served their purpose will be continued. Commercial navigation on 7 canalized waterways has receded to the point where there are now 58 locks and 24 low navigation dams affording little or no benefit to commercial traffic and insufficient collateral benefits to justify the continued operation and maintenance of the structures at Federal expense. State and local governmental agencies and industrial concerns dependent on the dams are being requested to assume the responsibility for maintenance of the discontinued facilities in consideration of the strictly local benefits derived therefrom.

In addition, lock operation will be curtailed on three canalized waterways where the volume of commercial traffic is insufficient at this time to warrant operation of all locks or to operate others on a full-time basis. The economies realized by this curtailment of projects which are of lesser order of importance than the main arteries of commerce will be applied to the maintenance of the major canalized waterways of importance to commercial water transportation and defense mobilization.

Cessation on or curtailment of operations on the sections of waterway listed below will be effected this fiscal year with a resultant economy to the United States during the next 6 years of over $5,000,000.

Cessation of operations

Waterway	Structures	Total estimated cost to operate and maintain for next 6 years
Upper Fox River, Wis	9 locks, 7 dams	$540,000
Illinois and Mississippi Canal, Ill	34 locks and other structures	1,500,000
Osage River, Mo	1 lock and dam	50,000
Upper Kentucky River, Ky	7 locks and dams (8 to 14 inclusive)	480,000
Green River, Ky	2 locks and dams (5 and 6)	120,000
Big Sandy River, Ky	1 lock and dam	150,000
Little Kanawha River, W. Va	4 locks and dams (2 to 5 inclusive)	1,000,000

Curtailment of operations

Waterway	Structures	Estimated operating economies fiscal year 1952
Upper White River, Ark	3 locks and dams	$30,000
Muskingum River, Ohio	4 locks and dams	50,000
Ouachita River, La. and Ark	3 locks and dams	100,000

A statement on each of these waterways containing a résumé of the authorized project, its present condition, plan of cessation or curtailment and justification therefor follows.

Upper Fox River, Wis.

(Above Lake Winnebago)

DESCRIPTION

The Fox River rises in Columbia County, Wis., and flows in a northerly direction into Green Bay, an arm of Lake Michigan. The upper Fox River comprises the 107-mile reach above Lake Winnebago. At Portage the Waterway connects with the Wisconsin River via 2-mile long Portage Canal.

AUTHORIZED PROJECT

The Federal improvement for the benefit of navigation on the Fox River, including the construction of nine locks and seven dams on the upper Fox River, was authorized by an act of Congress approved July 7, 1870, and subsequent acts. The improvement provided a channel depth of 6 feet for 125 miles from DePere to Montello, 76 miles above Lake Winnebago, and in the harbors on Lake Winnebago, and a depth of 4 feet from Montello to Portage, 31 miles, including the Portage Canal.

Eureka lock is the first of the nine low-lift locks on the upper river: Portage lock, 82 miles upstream, the last. The locks, which are approximately 35 feet wide and vary from 137 feet to 149 feet in length, are manually operated. There are fixed dams at all the locks except at Fort Winnebago and Portage locks and all locks except Portage, which is constructed of concrete and steel, have wooden gates. Montello, Governor Bend and Fort Winnebago locks are of composite stone and timber construction: Eureka, Berlin, White River, Princeton and Grand River locks are of stone masonry construction. Eureka was completed in 1876: Berlin, White River, Princeton and Grand River in 1878: Montello in 1901. Portage, Governor Bend and Fort Winnebago were rebuilt in 1928, 1931, and 1936, respectively. The total construction cost was $500,000 for the locks and $70,000 for the dams, and the annual cost of maintenance, major repairs, and operation in recent years has averaged more than $100,000.

PRESENT STATUS

The locks have been maintained in operating condition, and the dams with ordinary repairs may continue to be in reasonably safe condition for some years. No major repairs are included in the current work program for the upper Fox River, maintenance having been reduced to the barest essentials. Maintenance dredging was discontinued in 1927. Notwithstanding this curtailment, the total operating and maintenance cost this fiscal year will total about $40,000, compared with the average cost in recent years of over $100,000. The locks have been operated 5 days a week by one lockman each (Fort Winnebago operated by Portage lockman) from 6 a. m. to 10 p. m. to accommodate such small boat traffic as can operate in the available channels. These locks are now closed for the winter season.

COMMERCE AND TRAFFIC

There is no commercial navigation on the upper Fox River at present and none is expected in the foreseeable future. The towns along this section of river are largely dependent upon the adjoining agricultural areas and have relatively small manufacturing establishments. Freight traffic has been nonexistent since about 1922 and was negligible for many years prior to that date. Tonnage through the Eureka and Berlin locks dwindled from slightly over 1,000 tons per year for each lock in 1917 to about 5 tons a year in 1926. For the remaining seven locks during this 10-year period, commerce dwindled from a high of 250 tons per lock per year to none. What commerce there was consisted mainly of the movement of wire grass and clamshells.

The upper Fox River from Lake Winnebago to Portage now serves only recreational traffic, chiefly on the Lake Apuckawa and Lake Buffalo pools, above Princeton and Montello locks, respectively. During the years 1937 to 1946, inclusive, there was an annual average of 82 lockages per lock at the 9 locks on the upper river. During the 1949 navigation season (April to November, inclusive) the total number of boats using the locks varied from 15 at Portage lock to a maximum of 1,007 using Grand River lock. Most of the craft were outboard motor boats or rowboats with a draft of only 1 or 2 feet. A considerable amount of local recreational boating as well as fishing and hunting traffic does not use the locks.

PLAN OF CESSATION

a. Operation of the locks on the upper Fox River above Lake Winnebago will be suspended this fiscal year.

b. Haulovers, similar to the facility now available at the Grand River lock, will be installed at certain other locks as may be warranted, to permit rowboats and other small craft to be moved by hand around the lock.

c. Maintenance of the revetments along the Portage Canal and at Stockbridge and Brothertown Harbors on Lake Winnebago will be discontinued permanently. Suitable barricades will be installed where deemed essential to safety.

(*d*) The lockmen will be retained for transfer insofar as practicable to the lower Fox River or other project work if they desire.

(*e*) The State of Wisconsin and local governmental agencies are being approached with a view to obtaining their acceptance of fee title to, or long term license to occupy, the locks, dams, lands, buildings, and related property for park or other local purposes without cost to them for acquisition in consideration of their assuming the responsibility for future maintenance.

(*f*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

The upper Fox River project is obsolescent, unused by commercial traffic and affording insufficient collateral benefits to justify the continued operation of the locks and maintenance of the dams at Federal expense. Economies of $50,000 annually will be realized by discontinuance of lock and dam operation and ordinary maintenance, and, in addition, major repairs and reconstruction necessary to keep the locks in safe operating condition during the next 6 years will be avoided in the amount of $236,000. Total economies amounting to over one-half million dollars therefore will be effected during the next 6 years. Practically all recreational values could be retained by the preservation of the pools, and the few rowboats and other small craft finding it necessary to pass from pool to pool could be portaged.

ILLINOIS AND MISSISSIPPI CANAL, ILL.

DESCRIPTION

The Illinois and Mississippi (Hennepin) Canal connects the Illinois and the Mississippi Rivers, crossing the State of Illinois about 200 miles north of the confluence of those rivers. The main canal, 75 miles in length, extends from the Illinois River, near Bureau, running westerly via the Bureau Creek Valley to Rock River, near Colona, thence in the bed of Rock River to the rapids near Milan, and thence to the Mississippi River at the mouth of Rock River, at Rock Island, Ill. The feeder canal, 29 miles in length, extends from Rock Falls on Rock River to the summit level of the main canal, 28 miles from the Illinois River.

AUTHORIZED PROJECT

The construction of the Illinois and Mississippi canal for the benefit of navigation was authorized by the River and Harbor Act approved September 19, 1890. The waterway was opened to navigation in 1907, and comprises 34 locks, 2 dams, 9 aqueducts, 84 bridges, as well as culverts, seepage ditches, buildings and roads. There are 32 locks on the main canal. These locks have a standard clear width of 35 feet, a minimum clear length of 143 feet, and a minimum depth of 7 feet over the sills. All of the locks have wooden gates and all gates and valves are manually operated. In addition to these locks, there is a lock and control works at the head of the feeder canal at Rock Falls, and a lock in Rock River at Rock Falls connecting the pool of the Government dam with the power company's dam below.

There are dams at two locations: at the guard lock and at lock 30. At the former location there is a fixed dam across the Rock River, with a movable crest constructed of wood, concrete, and steel: at lock 30 there are crib dams across the north and south channels of Rock River. During the initial construction of the canal, between 1892 and 1907, the United States provided, at its expense, all the necessary railroad and highway bridges across the main waterway and feeder line of the canal and assumed responsibility for their maintenance thereafter. At the present time 84 bridges are maintained. There are 52 highway and 7 railroad bridges across the main canal, all of the fixed type except for 6 highway bridges and 1 railroad bridge. Across the feeder canal there are 23 highway and

2 railroad bridges, all fixed. There are also numerous minor structures along the canal route, including culverts to handle surface drainage. The construction cost of all the features, including locks, dams, bridges, culverts, buildings, and rights-of-way, amounted to $7,600,000. In addition, some $6,000,000 has been spent for operation and maintenance. The cost of maintenance of the project for fiscal year 1950 was $215,000, of which $85,000 was expended for operation of the locks.

PRESENT STATUS

The canal, now in a pronounced state of disrepair, is being operated in a stand-by status only: lockage is provided for commercial traffic any weekday, provided a 7-day advance notice is given; and for recreational craft 2 days a week, provided a 24-hour advance notice is given. No major repairs are included in the current work program for the waterway, maintenance having been reduced to the barest essentials. Notwithstanding this curtailment, the total operating and maintenance cost this fiscal year will total over $175,000.

COMMERCE AND TRAFFIC

The territory which the Illinois and Mississippi canal traverses is well-developed agricultural country. No large cities or towns are located immediately adjacent to the waterway. Commodities that moved on the canal in the past consisted mainly of grain, steel products, scrap iron, sand, gravel, stone, and wood piling. The peak year for commerce was 1929 when 30,000 tons was reported. For the years 1933 to 1945, inclusive, an annual average of 11,500 tons moved on the canal, while in 1946 and 1947 only 866 tons and 394 tons, respectively, was reported. In 1948, no tonnage at all was reported, and in 1949, 1,034 tons moved, all of it being contractor's construction equipment. Though the canal furnishes opportunities for recreational boating and fishing to residents of the region, the number of recreational craft using the waterway is negligible.

INITIAL PLAN OF CESSATION

(*a*) Operation of the locks will be discontinued this fiscal year and suitable measures deemed essential to safety will be taken.

(*b*) Employees affected will be retained insofar as practicable for other project work.

(*c*) A study will be made to determine the procedures and measures necessary to relieve the Federal Government of all future responsibility and cost of maintaining the existing project works.

(*d*) The State of Illinois, local governmental agencies, and private interests are being approached with a view to obtaining their acceptance of the lands, buildings, locks, dams, and related property for park or other local purposes and their assuming the responsibility for future maintenance.

(*e*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

The Illinois and Mississippi canal project is obsolescent, virtually unused by commercial traffic and affording insufficient collateral benefits to justify the continued operation of the locks and maintenance of the project structures at Federal expense. In operation nearly 50 years, the existing waterway is now outmoded, its usable dimensions inadequate to accommodate modern-day barge traffic. Economies of $200,000 annually will be realized by discontinuance of lock and dam operation and ordinary maintenance and, in addition, major repairs and reconstruction necessary to keep the structures in safe operating condition during the next 6 years will be avoided in the amount of $300,000. Total economies amounting to about $1,500,000, therefore, will be effected during the next 6 years provided local interests promptly take over the project facilities. These operating economies will be offset to some extent by the cost of cessation of the project as a navigable waterway.

OSAGE RIVER, MO.
(Lock and dam 1)

DESCRIPTION

The Osage River rises in eastern Kansas and flows easterly 516 miles in sinuous bends to the Missouri River, 14 miles below Jefferson City, Mo. Lock and dam No. 1 is located about 12 miles above the mouth of the Osage River.

AUTHORIZED PROJECT

Improvement of the Osage River for the benefit of navigation was authorized by the River and Harbor Acts approved September 19, 1890, and March 3, 1899. This project provided for a lock and dam near the mouth and for open-channel work consisting of wing dams and training walls, removal of obstructions, and dredging between the mouth and Warsaw, Mo., a distance of 171 miles, to obtain a uniform depth of 3 feet.

The lock and dam were completed in 1914 at a cost of construction of $660,000. The lock is 42 feet wide and 220 feet long. The dam is fixed, concrete type, 9 feet high and 840 feet long. The cost of operating and care for the fiscal year 1950 was $7,845.

PRESENT STATUS

The dam remains as originally constructed, except that the wickets and weirs which formed the movable crest have been removed. The present condition of the lock and dam is fair. The lock, which is staffed by two lockmen, is maintained in safe operating condition. No major repairs or dredging are included in the current work program for the navigation project, maintenance having been reduced to barest essentials.

COMMERCE AND TRAFFIC

Commercial traffic through the lock remained good through 1920, but with the construction of rail lines and a network of good roads and highways, the Osage River waterway has ceased to be the principal artery for the commerce of the Osage Valley. From approximately 1926 on, with the exception of an increase in traffic during the construction of Bagnell Dam, the lock has passed only a few commercial craft, an occasional sand barge, some recreational craft, and fishing boats. Present commercial navigation on the river does not require lockage. Recreational craft have averaged 65 lockages annually, these being small craft, largely skiffs.

PLAN OF CESSATION

(*a*) Locking services on the Osage River will be suspended this fiscal year.

(*b*) The dam, unless taken over by others, will remain in its present condition until it approaches an unsafe condition, at which time appropriate measures will be taken.

(*c*) The lockmen will be retained for transfer insofar as practicable to other project work.

(*d*) The State of Missouri, local governmental agencies, and private interests are being approached with a view to obtaining their acceptance of fee title to, or long term license to occupy, the dam, lock, lands, and related property for park or other local purposes without cost to them for acquisition in consideration of their assuming the responsibility for future maintenance.

(*e*) A public notice is being issued advising all concerned of the measures outlined above.

JUSTIFICATION

The Osage River navigation project is obsolescent; the lock is unused by commercial traffic and affords insufficient collateral benefits to justify the continued maintenance and operation of the lock and dam at Federal expense. Economies of $8,000 annually will be realized by discontinuance of lock and dam oper tion and repair. Total economies amounting to more than $50,000 will be effected during the next 6 years.

Upper Kentucky River

(Locks and dams 8 to 14, inclusive)

DESCRIPTION

The Kentucky River is formed by the confluence of its North and Middle Forks about 4 miles east of the town of Beattyville in east central Kentucky, the South Fork joining the main stream at that place, and flows in a general northwesterly direction about 259 miles, emptying into the Ohio River at Carrollton, Ky., 546 miles below Pittsburgh. The reach of the river from lock 8 to lock 14 is 110 miles in length.

AUTHORIZED PROJECT

The Federal improvement for the benefit of navigation on the Kentucky River, including the construction of locks and dams 8 to 14, inclusive, was authorized by the River and Harbor Act approved March 3, 1879, in accordance with the report published in House Executive Document 47, Forty-fifth Congress, third session. The improvement provided slack-water navigation of 6-foot minimum depth from the Ohio River to points on the three forks a short distance above Beattyville, Ky.

Lock 8 is 52 by 146 feet and constructed of masonry on rock, while the other six locks are 52 by 148 feet and built of concrete on rock. Dam 8 is rock-filled timber crib structure, with concrete capping, on rock foundation, and the remaining dams are concrete on rock, the lengths of the seven dams varying from 208 to 257 feet. Locks and dams 8 to 14 were completed in the years 1900, 1903, 1904, 1906, 1910, 1915, and 1917, consecutively. The total construction cost of these locks and dams was $2,311,223, and the cost of operation and care for fiscal year 1950 was $68,349.

PRESENT STATUS

These structures have been maintained in safe operating condition, with each lock and dam being staffed by one permanent employee. No major repairs are included in the current work program for the upper Kentucky River, maintenance having been reduced to the barest essentials. Notwithstanding this curtailment, the total operating and maintenance cost this fiscal year will total about $70,000, compared with the average cost in recent years of well over $100,000.

COMMERCE AND TRAFFIC

Following the transfer of the State navigation improvement to the United States and its Federal rehabilitation, commerce increased and from 1884 to 1924 fluctuated between 124,000 tons and 430,000 tons annually. This commerce consisted largely of timber floated downstream from the headwaters and coal transported upstream from the Ohio River, with sand and gravel becoming important items after 1910. After increasing continuously until about 1910, commerce declined to 124,000 tons in 1918, after which time crude oil began to be moved down the entire length of the river and then on the Ohio River to refineries, shipments of this oil increasing from 3,256 tons in 1918 to 136,482 tons in 1925. Shortly after the latter date, shipments of crude oil declined, and by 1931 ceased entirely. Until 1936, shipments of gasoline were made by barge from a refinery on the pool of dam 12, but this refinery no longer operates. In 1949 the barge traffic through locks 8 to 14 consisted of nonrecurring movements of equipment used in pipeline construction.

At present the only traffic through locks 8 to 14, inclusive, is recreational. In 1949, 111 boats used lock 8, 194 boats used lock 9, and an average of 50 craft per lock used the remaining five locks, the greater part of this traffic being made up of small recreational craft.

Many fishermen and others who do not use the locks benefit from the recreational opportunities of the area, and there are a number of communities that draw water from the pools formed by the dams.

PLAN OF CESSATION

(*a*) All locking services at locks 8 to 14 on the Kentucky River will be suspended this fiscal year.

(*b*) These structures, unless taken over by others, will remain in their present condition until they approach an unsafe condition, at which time the structures

will be breached to permit a slow draw-down of the pools and as much of the structure removed as may be necessary.

(*c*) The lockmen will be retained for transfer insofar as practicable to the lower Kentucky River or other project work if they desire.

(*d*) The State of Kentucky and local governmental agencies are being approached with a view to their taking over the lands, buildings and related property for park or other local purposes under license without cost to them in consideration of their assuming the responsibility for maintenance. Fee title to the real estate at these locks will remain with the Federal Government since the land will be needed when the authorized Jessamine Creek Dam and Reservoir is constructed at some future date.

(*e*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

That part of the Kentucky River project above lock 8 is obsolescent, now unused by commercial traffic and affording insufficient collateral benefits to justify the continued operation and maintenance of the locks at Federal expense. Economies of $50,000 annually will be realized by discontinuing the operation of the locks, and, in addition, the minimum repairs and reconstruction necessary within the next 6 years to keep the structures in safe operating condition will be avoided in the amount of $180,000. Total economies amounting to about one-half million dollars, therefore, will be effected during the next 6 years. Most of the recreational values would be retained by the preservation of the pools, and the owners of small craft desiring passage from pool to pool could portage their boats by means of an inexpensive haul-over installed alongside the lock chamber, if practicable and warranted.

GREEN RIVER, KY.

(Locks and dams 5 and 6)

DESCRIPTION

The Green River rises in Casey County, Ky., flows in a northwesterly direction 370 miles, and empties into the Ohio River about 8 miles above Evansville, Ind. Locks and dams 5 and 6 are located about 168 and 182 miles, respectively, above the mouth of the river, the former near Glenmore, the latter near Brownsville.

AUTHORIZED PROJECT

Construction of locks and dams 5 and 6 of the Federal improvement for the benefit of navigation on the Green River was authorized by the River and Harbor Acts of July 13, 1892, and July 13, 1902, a subsequent act, that of July 3, 1930, authorizing construction of a new lock at dam 5. The construction of the locks and dams, and the removal of snags and slides, extended slack-water navigation on Green River upstream to Mammoth Cave, Ky.

Lock 5 is 56 feet by 360 feet, lock 6 is 36 feet by 145 feet, and both locks are constructed of concrete on pile foundation. Dam 5 is 300 feet in length and built of concrete on rock and pile foundation; dam 6 is 220 feet in length and built of concrete on rock fill and pile foundation. Lock and dam 5 were completed in 1934, lock and dam 6 in 1905, the cost of construction of the former being $1,020,868, of the latter, $168,415, and the cost of operating and care for fiscal year 1950 was $12,648 and $6,425, respectively.

PRESENT STATUS

These structures are in safe operating condition, and each lock is staffed with one permanent employee. Occasional maintenance work has been performed by a repair crew. No major repairs are included in the current work program for this part of the Green River project, maintenance having been reduced to the barest essentials. Notwithstanding this curtailment, the total operation and maintenance cost this fiscal year will total about $15,600.

COMMERCE AND TRAFFIC

During the 1920's, and before, commerce on the entire Green River averaged one-half million tons annually and consisted largely of the movement of asphalt

in the upper pools and coal on the lower reaches. In 1934, the year a new lock 5 was completed, total commerce on the river amounted to 350,000 tons. Commerce then declined and in 1949 it totaled only about 45,000 tons. Until 1946 there was a substantial movement of asphalt through locks 5 and 6 on the Green River, from mines on Nolin River in the pool of dam 6 to Bowling Green, Ky., in the pool of dam 1 on the Barren River. The asphalt loading terminal on Nolin River has since been dismantled and asphalt from the mines is currently being shipped by trucks and rail. Resumption of river shipments of asphalt is not contemplated. Barge traffic in 1949 at lock 5 consisted of the movement of construction equipment to the site of a bridge in the pool of dam 5, and is of a nonrecurring nature. No commercial navigation used locks 5 and 6 in 1950.

The few small craft using these locks are for recreational purposes, the majority of them on fishing trips or on trips to Mammoth Cave National Park in the pool of lock 6. During the year 1950, 23 boats used lock 5 and 24 boats used lock 6.

PLAN OF CESSATION

(*a*) All locking services at locks 5 and 6, Green River, will be suspended this fiscal year.

(*b*) These structures, and the dams, unless taken over by others, will remain in their present condition until they approach an unsafe condition, at which time appropriate measures will be taken.

(*c*) The lockmen will be retained for transfer insofar as practicable to the lower Green River or other project work if they desire.

(*d*) The State of Kentucky, local governmental agencies and others are being approached with a view to their taking over the lands, buildings, and related property for park or other local purposes under license without cost to them in consideration of their assuming the responsibility for maintenance. Fee title to the real estate at these locks will remain with the Federal Government since the land will be needed when the authorized Mining City Dam for flood control is constructed.

(*e*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

That part of the Green River project above lock 5 is obsolescent, unused by commercial traffic and affording insufficient collateral benefits to justify the continued operation and maintenance of locks and dams 5 and 6 at Federal expense. Economies of $15,000 annually will be realized by discontinuing the operation of these locks and, in addition, the minimum repairs and reconstruction necessary within the next 6 years to keep the structures in safe operating condition will be avoided in the amount of $30,000. Total economies amounting to about $120,000, therefore, will be effected during the next 6 years.

Big Sandy River, Ky.

(Lock and dam 1)

DESCRIPTION

The Big Sandy River, about 27 miles in length, is formed by the junction of the Levisa and Tug Forks at Louisa, Ky., flows in a northerly direction, and empties into the Ohio River at Catlettsburg, Ky. Lock and dam No. 1 is located near Catlettsburg.

AUTHORIZED PROJECTS

The construction of lock and dam No. 1, the only structures still maintained and operated for the benefit of navigation on the Big Sandy River, was authorized by the River and Harbor Act approved March 3, 1899. Under this project, there were constructed two other locks and dams on the main stem of the Big Sandy and a lock and dam each on Levisa and Tug Forks, providing a waterway with a minimum depth of 6 feet from the Ohio River to Louisa, thence up Levisa Fork and Tug Fork for distances of about 17 and 12 miles, respectively.

Lock 1 is 55 feet by 160 feet, and is constructed of concrete on rock. The lock gates are of steel construction and hand operated. Dam 1 is a movable dam, built on sandstone, with a navigable pass of trestles and wooden needles, and a weir of steel chain wickets. A maneuver boat is required for its operation. Lock and dam No. 1 was completed in 1905 at a cost of construction of $335,245 and the cost of its operation and care for fiscal year 1950 was $14,755.

PRESENT STATUS

Dam No. 1 is in a reasonably safe condition, although some repairs are needed. The lock is maintained for limited operation, but extensive repairs to the lock gate, gate sills and valves would be necessary to place them in good operating condition. No major repairs are included in the current work program for this navigation project, maintenance having been reduced to the barest essentials. Operation and maintenance of all other structures on the Big Sandy and its forks has ceased. The pool of lock and dam No. 1 is used as a source of municipal water supply for several nearby towns, as well as a source for industrial purposes.

COMMERCE AND TRAFFIC

In the years prior to 1900 a considerable tonnage of sawlogs and timber products, coal, and some livestock, grain, and produce were moved on the Big Sandy River and its forks. It was estimated in 1899 that commerce on the waterway averaged between 325,000 and 400,000 tons annually. However, this traffic gradually declined as the virgin timber reserves adjacent to the streams became depleted, and no recovery has been made. Some 10 years ago commerce on the waterway consisted of coal, poles, railroad ties, and petroleum products.

No commercial traffic has moved on the Big Sandy River and its tributaries since 1943, and operation of all structures above lock No. 1 ceased in 1945 or before. Some recreational craft have used lock No. 1 and the pool above is used to a comparatively minor extent for boating, fishing, and swimming.

PLAN OF CESSATION

(*a*) Locking services at lock No. 1, Big Sandy River, will be suspended this fiscal year.

(*b*) Dam No. 1, unless taken over by others, will be left in its present condition until the structure approaches an unsafe condition, at which time appropriate measures will be taken.

(*c*) The operating personnel will be retained for transfer insofar as practicable to other project work.

(*d*) The State of Kentucky, local governmental agencies, and private interests are being approached with a view to obtaining their acceptance of fee title to, or long-term license to occupy, the dam, lock, lands, buildings, and related property for park or other local purposes without cost to them for acquisition in consideration of their assuming the responsibility for future maintenance.

(*e*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

The Big Sandy River project is obsolescent, unused by commercial traffic and affording insufficient collateral benefits to justify the continued maintenance and operation of lock and dam No. 1 at Federal expense. Economies of $15,000 annually will be realized by discontinuance of lock and dam operation and ordinary maintenance, and, in addition, major repairs and reconstruction necessary to keep the lock in safe operating condition will be avoided in the amount of $60,000. Total economies amounting to about $150,000, therefore, will be effected during the next 6 years.

LITTLE KANAWHA RIVER, W. VA.

(Locks and dams 2 to 5 inclusive)

DESCRIPTION

The Little Kanawha River, 167 miles in length, rises on the western slope of Laurel Hill, W. Va., flows in a general northwesterly direction, and empties into the Ohio River at Parkersburg, W. Va.

AUTHORIZED PROJECT

The Federal improvement for the benefit of navigation on the Little Kanawha River was authorized by the River and Harbor Acts approved June 14 1880 and March 3, 1905. The former act authorized the construction of lock and dam No. 5; the latter act authorized the purchase and repair of locks and dams Nos. 1 to 4, inclusive. These five locks with fixed dams were designed to provide a

navigable depth of 4 feet and channel width of 60 feet from the mouth of the river to Creston, a distance of 48 miles.

Construction of locks and dams Nos. 1 to 4 was completed in 1874 by the Little Kanawha Navigation Co. The Federal Government constructed lock and dam No. 5 in 1891 and in 1905 purchased the first four structures and made the necessary repairs to place them in safe operating condition. The five locks are single chambered, of stone or rubble masonry construction, with hand-operated timber mitering gates. Lock 5 is 25 feet wide by 125 feet long, and the others are 23 feet by 125 feet. The dams are of the fixed type, of stone-filled timber crib construction, varying in length from 250 to 289 feet. The total Federal first cost of these locks and dams was $470,000, and the cost of maintenance and operation of the project for the fiscal year 1950 was $8,000.

PRESENT STATUS

The existing navigation structures on the Little Kanawha River with the exception of lock and dam No. 1 are in poor condition and deteriorating rapidly. The lowermost lock and dam are maintained in operating condition, attendants being kept at this lock only in order to supervise and operate the lock as necessary. The remaining four locks are inoperative. The river is the primary source of water supply for an industrial plant located just above dam No. 1, for the town of Elizabeth above dam No. 3, and for a State fish hatchery above dam No. 4. An upper section of dam No. 4 was washed out during a flood in 1950. This dam and dams Nos. 2, 3, and 5 have exceeded their safe life and would require extensive reconstruction to place them in safe condition. No major repairs to the project structures are included in the current work program, maintenance being held to the barest essentials.

COMMERCE AND TRAFFIC

The Little Kanawha Navigation Co. canalized the lower 43 miles of the river 75 years ago for the transportation of oil from the Burning Springs field. Before 1900, coal oil was produced and shipped in great quantities, but the wells stopped flowing and this commerce decreased. Other commodities shipped on the Little Kanawha waterway consisted principally of pulpwood and saw logs. Navigation in recent years has diminished until, at present, there is no commercial traffic whatsoever above lock No. 1 and very little navigation by recreational craft except in the pool above this lock. The Little Kanawha Valley has limited commercial and industrial development and no commercial navigation requiring lockage is expected in the foreseeable future. At lock No. 1 there were 34 lockages in 1948 and 155 lockages in 1949, all for recreational craft.

PLAN OF CESSATION

(*a*) Services at lock No. 1 on the Little Kanawha River will be suspended this fiscal year except necessary operations to maintain the pool and safety measures.

(*b*) Dams Nos. 1 and 2 will remain in their present condition at this time pending possible transfer of the structures to local interests.

(*c*) Measures will be taken in the interest of safety to remove such portions of Dams Nos. 3, 4 and 5 as may be necessary after gradual draw-down of the pools unless the responsibility for maintenance of these structures in safe condition is promptly assumed by local interests.

(*d*) The affected lock-operating personnel will be retained for transfer insofar as practicable to other project work.

(*e*) The State of West Virginia, local governmental agencies, and private interests are being approached with a view to obtaining their acceptance of fee title to, or long-term license to occupy, the dams, locks, lands, buildings, and related property for park and other local purposes without cost to them for acquisition in consideration of their assuming the responsibility for future maintenance.

(*f*) A public notice has been issued advising all concerned of the measures outlined above.

JUSTIFICATION

The Little Kanawha River project is obsolescent, unused by commercial navigation, and affording insufficient collateral benefits to justify the continued maintenance of the project structures at Federal expense. Major repairs and reconstruction necessary to restore and maintain all dams in safe condition during the next 6 years would cost over $1,000,000. This large expenditure would be

required at this time, unless the responsibility for maintenance is assumed by local interests or the deteriorated portions of the dams removed, inasmuch as parts of the existing structures are now subject to possible failure.

Upper White River, Ark.

(Locks and dams 1, 2 and 3)

DESCRIPTION

The White River rises in northwestern Arkansas and flows 690 miles north into Missouri, then southeasterly through Arkansas to the Mississippi River, 26 miles above Arkansas City, Ark. The navigation structures on the upper part of the river are lock and dam No. 1, 1 mile below Batesville, Ark., and locks and dams 2 and 3, 8 and 19 miles, respectively, above that city.

AUTHORIZED PROJECT

The original project for the upper White River, adopted by the River and Harbor Act approved March 3, 1899, provided for the construction of 10 fixed dams with concrete locks to provide 4-foot navigation the year around between Batesville and Buffalo Shoals, Ark. The River and Harbor Act approved March 2, 1907, after providing for the completion of the third lock and dam, terminated further construction work. Dams Nos. 1, 2, and 3 were completed in 1904, 1905, and 1908, respectively, at a total construction cost of $813,196. The cost of operation and maintenance of the three locks and dams for the fiscal year 1951 was $30,000.

COMMERCE AND TRAFFIC

Commerce on the White River above Batesville since completion of the locks and dams has ranged from a minimum of 1,744 tons in 1921 to a maximum of 78,060 tons in 1930. During the past few years there has been very little commercial navigation on the upper White River, 80 percent of the lockages at the three locks being for small recreational craft of less than 2-foot draft. Intrapool commerce for the calendar year amounted to 36,000 tons, consisting principally of sand and gravel.

PLAN OF CURTAILMENT

(*a*) Operation and maintenance personnel will be reduced to a minimum, stationed at lock No. 1, and used to operate and maintain all three of the locks and dams.

(*b*) Passage through locks 2 and 3 will require 24 hours' advance notice to the personnel stationed at lock No. 1.

(*c*) Upkeep and repair of the structures will be limited to the work immediately essential to maintain the locks and dams in reasonably safe operating condition.

(*d*) Operating personnel affected will be retained for transfer insofar as practicable to other project work.

(*e*) State and local governmental agencies will be approached with a view to obtaining their acceptance of the dams, locks, buildings, and project lands for park and other local purposes except such lands as may be needed for the proposed Wolf Bayou Reservoir.

(*f*) A public notice has been issued advising all concerned that curtailment of lock operations will be effective July 26, 1951.

Curtailment of operation and maintenance of the project will result in annual economies to the Federal Government of $30,000. The savings realized will be applied to the maintenance of those waterways of importance to commercial water transportation and defense mobilization.

Muskingum River, Ohio

(Locks Nos. 1, 2, 3, and 4)

DESCRIPTION

The Muskingum River, 112 miles in length, and lying entirely in the State of Ohio, is formed by the junction of the Walhonding and Tuscarawas Rivers at Coshocton, flows in a southerly direction and empties into the Ohio River at Marietta, Ohio, 172 miles below Pittsburgh, Pa.

AUTHORIZED PROJECT

Locks and dams Nos. 1 to 10, inclusive, built by the State of Ohio, were taken over by the United States under the authority of the River and Harbor Act approved August 5, 1886. The River and Harbor Act approved March 3, 1905, provided for the construction of an additional structure, lock and dam 11, and the extension of lock 10. Under the existing project the Federal Government restored and has maintained and operated the State works to provide slack-water navigation between lock No. 1 at Marietta and Dresden, Ohio, a distance of 93 miles.

All locks and dams except lock and dam 11 were originally built by the State of Ohio during the period 1837 to 1841. Lock and dam 11 was completed by the Federal Government in 1910. The total Federal cost of construction was $630,000, and the estimated average annual cost of operating and care, exclusive of major repairs, is $138,000. For fiscal year 1951 the cost was $125,000.

Locks and dams 1, 2, 3, 4, 5, and 8 are in a good state of repair; 6 and 11 are in fair condition; and 7, 9, and 10 are in poor condition. The total cost of repairs to place all the locks and dams in good operating condition is estimated at $875,000. All locks have been in operation and attendants have been stationed at 7 of the 11 locks.

COMMERCE AND TRAFFIC

Prior to the year 1943, through traffic on the Muskingum River consisted principally of the movement of petroleum products from the Ohio River to a terminal at Zanesville, Ohio, in pool 9. This movement was discontinued in 1942, deliveries since then being made by tank trucks. Sand and gravel has moved on the river in considerable quantities from time to time, but no coal has been shipped by barge since 1945. A sand and gravel company with its terminal located on pool 9 is now the principal user of the locks. This company operates chiefly in pools 7, 8, 9, and 11. During 1949, 19,100 tons moved through lock 8, and 159,150 tons through lock 9. Except for an occasional shipment through lock No. 1, no tonnage passed through the other locks. The waterway is used by recreational craft during the summer season.

CURTAILMENT OF OPERATIONS

In the interest of economy, and as an initial step toward cessation of Federal maintenance and operation of this obsolescent canalization project, lock operation at locks Nos. 1, 2, 3, and 4 will be discontinued at midnight August 10, 1951. The upper lock gate at each of the locks will remain in closed position. A public notice has been issued advising all concerned of this action. Curtailed operation and maintenance of the project will effect economies of $50,000 this fiscal year. These savings will be applied to the maintenance of those waterways of importance to commercial water transportation and defense mobilization.

Ouachita River, La. and Ark.

(Locks and dams 5, 6, and 8)

DESCRIPTION

The Ouachita River rises in Polk County, Ark., and flows some 600 miles in a general southeasterly and southerly direction through Arkansas and Louisiana. It is joined by Tensas and Little Rivers at Trinity, La. (Jonesville, La.), below which place it is the Black River and which enters the Red River 35.5 miles above its mouth.

PROJECT

The existing improvements for navigation were authorized by the River and Harbor Acts of March 3, 1871, June 10, 1872, August 14, 1876, and July 5, 1884. A separate project for work in the Ouachita River between Camden and Arkadelphia was adopted by the River and Harbor Act of August 11, 1888.

The completed project provides for a navigable depth of 6½ feet at low water from the mouth of the Black River, La., to Camden, Ark., a distance of about 351 miles, by means of six locks and dams, dredging and removal of obstructions between the mouth of Black River and Arkadelphia, Ark., 417 miles.

All six of the dams are of the movable type and were completed between 1915 and 1926. The total cost of construction was $5,110,000. The cost of operation and ordinary repair for the six locks and dams for the fiscal year 1951 was $200,000.

COMMERCE AND TRAFFIC

The chief commodities transported on the Ouchita River below Sterlington, La., during the past few years were logs, pipe, and menthol. The commerce on this lower section which embraces locks 2, 3, and 4 (lock No. 1 not built) amounted to some 50,000 tons in the calendar year 1950. No commercial tonnage is being locked through locks 5 and 6 and only a relatively small tonnage of barged logs passed through lock 8 in 1950 (lock 7 not built).

CURTAILMENT OF OPERATIONS

In the interest of economy, the operation of locks 5, 6, and 8 (above Sterlington, La.) is being suspended this fiscal year and the pools formed by the wicket dams will not be maintained. The operating mechanism of the lock gates will be secured to prevent unauthorized operation and possible accident. The lower three locks, Nos. 2, 3, and 4, will remain in operation. The curtailed operation and maintenance of the project will effect economies of over $100,000 this fiscal year, which savings will be applied to the maintenance of those waterways of importance to commercial water transportation and defense mobilization.

STATUS OF CIVIL APPROPRIATIONS

Chairman McKellar. The Corps of Engineers has supplied for the information of the committee a report on the status of civil appropriations as of June 30, 1951, which will be placed in the hearings at this point.

(The information referred to is as follows:)

Monthly report on status of civil appropriations—period ended June 30, 1951 (summarized from standard forms 133)

Appropriation titles	Unobligated balance, July 1, 1950	Current appropriation	Transfer to (+) or from (−) this appropriation		Less reserve for savings (sec. 1214)	Net amount available for obligation	Cumulative apportionments to end of fourth quarter fiscal year 1951	Obligations incurred current fiscal year	Unliquidated obligations brought forward July 1, 1950	Expenditures, current fiscal year	Unobligated, columns (7)—(9)
			Actual	Anticipated							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Maintenance and improvement of existing river and harbor works (major capital outlay)	$7,432,540	$118,921,500			$2,781,000	$123,573,010		$114,910,213	$67,872,477	$119,260,885	$8,662,827
Reimbursements		1,010,000				1,010,000		706,253		706,253	303,747
Subtotal, major capital outlay	7,432,540	119,931,500			2,781,000	124,583,040	$124,583,040	115,616,466	67,872,477	119,967,138	8,966,574
Maintenance and improvement of existing river and harbor works (current expenses)	8,922,979	83,890,000	−$2,417,015		13,008,000	77,387,964		68,490,545	21,333,038	67,145,257	8,897,419
Reimbursements		17,010,800				17,010,800		16,566,406		16,566,406	444,394
Subtotal, current expenses	8,922,979	100,900,800	−2,417,015		13,008,000	94,398,764	94,390,779	85,056,951	21,333,038	83,711,663	9,341,813
Total	16,355,519	220,832,300	−2,417,015		15,789,000	218,981,804	218,973,819	200,673,417	89,205,515	203,678,801	18,308,387
Alteration of bridges over navigable waters	2,805,139	900,000			900,000	2,805,139	2,805,139	1,573,323	704,498	641,050	1,231,816
Power plant, Bonneville Dam, Columbia River, Oreg., construction	124,831					124,831	124,831	37,504	39,425	21,656	87,327
Flood control, Mississippi River and tributaries	647,461	66,422,400	−3,600		5,022,000	62,044,261		61,542,844	26,204,647	62,217,725	501,417
Reimbursements		1,380,600				1,380,600		938,571		938,571	442,029
Total	647,461	67,803,000	−3,600		5,022,000	63,424,861	63,423,461	62,481,415	26,204,647	63,156,296	943,446
Flood control, general	39,864,682	386,308,250	−2,345,370		27,348,000	396,479,562		355,314,936	215,248,642	347,468,282	41,164,626
Reimbursements		4,803,500				4,803,500		3,800,392		3,800,392	1,003,108
Total	39,864,682	391,111,750	−2,345,370		27,348,000	401,283,062	401,233,062	359,115,328	215,248,642	351,268,674	42,167,734

Flood control, general, emergencies	4,114,612	8,700,000	+1,000,000			13,814,612	13,814,612	6,129,351	1,088,741	5,904,633	7,685,261
Flood control on tributaries of Mississippi River, emergency	201,457	450,000				651,457	651,457	92,198	89,334	153,532	559,259
Flood control:											
Sacramento River, Calif	364,267	2,524,500			508,000	2,380,767	2,380,767	1,929,625	1,900,327	2,635,417	451,142
Sutton Reservoir, W. Va	133,302					133,302	133,302	133,302	301,715	433,017	
Trinity River, Tex	97,411					97,411	97,411	89,537	305,217	175,405	7,874
Roseville, Ohio		432,000			432,000						
Niagara redevelopment and remedial works investigation, Corps of Engineers			+450,000			450,000	450,000	277,447			172,553
Hydraulic mining in California, debris fund	48,311					48,311	27,000	13,764	776	13,218	34,547
Maintenance and operation of dams, etc	152,662					152,662	152,662	152,662	12,881	165,543	
Subtotal, rivers and harbors, flood control	64,909,654	692,753,550	−3,315,985		49,999,000	704,348,219	704,267,523	632,698,873	335,101,718	628,247,242	71,649,346
Hospitals and domiciliary facilities, Veterans' Administration (transferred to Army)	17,016,555		+42,573,691			59,590,246		47,174,059	54,503,432	83,545,036	12,416,187
Contract authorization	43,183,851		−47,700,000			−4,516,149		−9,492,063	72,816,148		4,975,914
Total	60,200,406		−5,126,309			55,074,097	55,074,097	37,681,996	127,319,580	83,545,036	17,392,101
Expense interior development, Executive Office of the President (allotment to Army) 1951			+8,360			8,360					8,360
Salaries and expenses:											
American section, International Commission (transfer to Army) 1951			+35,000			35,000	35,000	35,000			
Philippine Rehabilitation, Department of State (transfer to Army):											
1947-50	1,021,766		−1,021,766					−216,188	551,870	306,546	216,188
1947-51			+1,021,766			1,021,766	1,021,766	597,188		560,510	424,578
Pay to States, Flood Control Act of June 28, 1938 as amended	566,393					566,393	566,393	566,393		566,393	
Maintenance and operation, certain Federal water mains outside District of Columbia:											
1951		16,000			1,000	15,000	15,000	15,000		10,836	
1950	20					20		−231	1,133	902	251
Working fund, Army Engineers, Civil:											
No year	901,357	758,571				1,659,928		827,877	556,854	996,944	832,051
1951		556,555				556,555		524,419		451,350	32,136
1950	152,510	160,025				312,535		303,433	137,915	411,158	9,102
1949	4,706	−2,706				2,000		2,000		2,000	

Monthly report on status of civil appropriations—period ended June 30, 1951 (summarized from standard forms 133)—Continued

Appropriation titles	Unobligated balance, July 1, 1950	Current appropriation	Transfer to (+) or from (−) this appropriation		Less reserve for savings (sec. 1214)	Net amount available for obligation	Cumulative apportionments to end of fourth quarter fiscal year 1951	Obligations incurred current fiscal year	Unliquidated obligations brought forward July 1, 1950	Expenditures, current fiscal year	Unobligated, columns (7)—(9)
			Actual	Anticipated							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Working fund, Army, Civil:											
1951		$15,112,000				$15,112,000		$15,112,000		$2,324,079	
1950	$1,541,461	$24,747				1,566,208		−738,013	$11,389,865	6,251,578	$2,304,221
Working fund, Army Engineers, Civil (trust fund)	31,631	8,500,000				8,531,631		7,943,728	185,502	271,629	587,903
Funds contributed for improvement of rivers and harbors	522,149	3,605,750				4,127,899		732,950	3,171,969	2,840,099	3,394,949
Funds advanced for improvement of rivers and harbors	408,897					408,897		326,941		200,000	81,956
Funds contributed for flood control, rivers and harbors	2,299,484	4,911,226				7,210,710		4,348,988	2,501,977	3,658,283	2,861,722
Grand total	132,560,434	726,395,718	−$8,398,934		$50,000,000	800,557,218	$760,979,779	700,762,354	480,918,383	730,644,583	99,794,864

COMMUNICATIONS REGARDING HOUSE ACTION

Chairman MCKELLAR. I have a letter from Senator McCarran with reference to House action in denying funds for surveys and investigations, resulting in no provision of funds for transfer to the Weather Bureau for operation of the Hydrometeorological Section and the Hydroclimatic Network, with which he forwarded a letter to him from the Weather Bureau. I shall insert these communications in the hearings.

(The communications are as follows:)

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
July 2, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate.

MY DEAR SENATOR: I am enclosing a letter which I have received from the Chief of the Weather Bureau, which letter was prepared at my request and outlines the effect of the House action in denying funds for the operation of the Hydrometeorological Section and the Hydroclimatic Network.

I am quite concerned about this action and will appreciate it very greatly if, when the Corps of Engineers appears before the Civil Functions Subcommittee, you go into this matter. I respectfully recommend that every consideration be given to the restoration of this fund so that the Weather Bureau may carry on.

In checking the regular budget for this agency, I find that no funds of any kind could be used as a substitute for this work.

I know that you will agree with me that all appropriation items for a particular agency should be consolidated in that agency's budget rather than appropriated to several departments, which departments then must transfer to the particular agency. As the budget for the fiscal year 1952 has already been submitted and the appropriation bills are already in process, I do not recommend that we change this procedure for this year. However, I believe that the Senate Appropriations Committee should make a strong recommendation to the Bureau of the Budget so that in the budget for the fiscal year 1953 appropriations for particular agencies will be found in one place.

I extend my kindest personal regards and all best wishes to you.

Sincerely,

PAT MCCARRAN.

DEPARTMENT OF COMMERCE,
WEATHER BUREAU,
Washington, June 27, 1951.

Hon. PAT MCCARRAN,
United States Senate, Washington, D. C.

DEAR SENATOR MCCARRAN: Pursuant to a request from your office, the following summarizes the effect of House action on H. R. 4386 (Rept. No. 544), a bill making appropriations for civil functions administered by the Department of the Army for the fiscal year ending June 30, 1952, and for other purposes.

Report No. 544, House of Representatives, page 5, states "The committee is denying the request of $4,900,000 for preliminary examination, surveys, and study program." Funds for this purpose were represented by the Corps of Engineers under the heading of "Flood control." Following this report the Corps of Engineers advised the Weather Bureau in letter of June 18, 1951 (copy attached), that funds ($600,000) for the operation of the Hydrometeorological Section and the Hydroclimatic Network were included in this item. For more than 10 years these two projects in the Weather Bureau have operated on "flood control" funds advanced by the Corps of Engineers.

The Hydrometeorological Section studies the extent, severity, and meteorological conditions associated with rain storms and determines the limits of maximum precipitation to be expected during any studied period of time over any chosen watershed. Guess work is thus reduced in engineering designs for

flood-control structures and great savings in construction costs have resulted. The highest value of these studies rests on the availability of information developed prior to the beginning of the engineering works concerned.

The Hydroclimatic Network for precipitation has also been maintained for about 15 years by the Weather Bureau with funds transferred from the Corps of Engineers, in accordance with the Flood Control Act of 1938 (33 U. S. C. 706). The special importance of this particular station network rests on the fact that rainfall is recorded automatically in a form useful for time-duration studies of engineers who deal with run-off problems. Gages will become inoperative in a very short time if the network is neglected for lack of supporting appropriations. Reestablishment at some later date will involve new overhead costs, and the value of records will be definitely impaired by gaps in continuity that will result from allowing the program to lapse.

House Document 706, Eighty-first Congress, A Program To Strengthen the Scientific Foundation in Natural Resources; the Report of the President's Water Resources Policy Commission (1950); and resolutions of the Federal Inter-Agency River Basin Committee all point up the need to increase the extent and intensity of the Hydroclimatic Network. The importance of these programs to the Corps of Engineers, Bureau of Reclamation, United States Department of Agriculture, United States Public Health Service, Bureau of Public Roads, and others cannot be overemphasized. The Weather Bureau has not included funds for these programs in budget estimates for 1952, and will be unable to continue these programs unless a transfer of funds from the Corps of Engineers is approved or equivalent action for support taken by Congress.

While the language of H. R. 4386, page 7, lines 6 through 14, permits the continued transfer of funds to the Weather Bureau for these projects, we have been informally advised by the Corps of Engineers that their legal staff has interpreted the history of hearings on H. R. 4386 as a prohibition against the continued transfer of funds for the purpose stated above.

Sincerely yours,

F. W. REICHELDERFER,
Chief of Bureau.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, June 18, 1951.

CHIEF, UNITED STATES WEATHER BUREAU,
Department of Commerce, Washington 25, D. C.

DEAR SIR: In confirmation of telephone conversation between Mr. Snyder, of this office, and Mr. Hiatt, of your office, the following information is furnished concerning action by the House of Representatives on the appropriation bill providing funds for civil-works activities of the Corps of Engineers. The bill as reported by the Appropriations Committee and passed by the House of Representatives excluded the item for preliminary examinations, surveys, and study programs under "Flood control, General," which includes the amount of $600,000 for transfer to the United States Weather Bureau. The item eliminated is that normally providing funds for the Hydrometeorological Section and the Hydroclimatic Network.

Although strong representation will be presented to the Senate Appropriations Committee justifying replacement of this item in the appropriations bill, no estimate can be made of the time or extent of final action. The Senate hearings on our appropriation will probably not begin before the last week in June and normally last about 3 weeks. Action thereafter cannot be estimated.

The necessity of reporting this situation is regreted, but it is desired to keep you as fully informed as possible so that such planning as is necessary and possible will be accomplished in advance of final action by the Congress.

Sincerely yours,

STANLEY O. BEIFF,
Colonel, Corps of Engineers,
Executive, Civil Works.

REVIEW OF REPORTS ON KANSAS RIVER AND TRIBUTARIES

Chairman McKellar. During the course of the hearings on the Kansas River Basin flood control, on Friday, July 13, reference was made to several alternate plans, alleged to be superior to the Pick-Sloan plan. For the information of the committee and of the Senate, I shall offer for the record at this point excerpts from House Document No. 642, Eighty-first Congress, a report from the Chief of Engineers on a review of reports on the Kansas River and tributaries. The committee has received numerous protests from individuals requesting further study be given to alternate plans. The discussions in the excerpts which I now place, without objection, in the record indicate that considerable study has been made of alternate plans, and such plans have proven not economically justified.

107. *Alternate reservoir plans.*—During a public hearing at Marysville, Kans., on September 7, 1944, attended primarily by owners of property within the area of the Tuttle Creek Reservoir, an alternate plan for control of Kansas and Big Blue River floods was proposed. This proposal, sponsored by the Tri-county Blue River Study Committee composed of members from Marshall, Riley, and Pottawatomie Counties, Kans., recommended that (1) a smaller reservoir be located on the Big Blue River north of Marysville, on the Little Blue River west of Waterville, and on the Black Vermillion River east of Frankfort; (2) that the Kanopolis, Harlan County, and other proposed dams on the tributaries of the Kansas River be completed; and (3) that a program of small dams and terraces be initiated. Subsequently, on May 21, 1946, a further conference with representative interests from the Big Blue and Republican River Basins was held at Manhattan, Kans. This conference was conducted by the division engineer, Missouri River division, and the district engineer, Kansas City district, and was attended by representatives of the State engineers of Kansas and Nebraska, the Soil Conservation Service, and the Bureau of Reclamation, in addition to qualified representatives from various parts of the Big Blue and Republican River Basins. A system of six small reservoirs was proposed by local interests at this meeting as follows:

TABLE 32.—*Reservoirs proposed by local interests*

Reservoir	*Stream*
Oketo	Big Blue River.
Crete	Do.
Waterville	Little Blue River.
Frankfort	Black Vermillion Creek.
Indian (3 reservoirs)	Indian Creek.
Wilber	Turkey Creek.

Four of these sites, including projects on Indian Creek near Beatrice, Nebr., and Indian Creek (second creek of the same name) near Wymore, Vermillion Creek near Frankfort, Kans., and Indian Creek (third creek of the same name) near Beaver Crossing, Nebr., were investigated by field reconnaissance and discarded due to the small areas drained and lack of suitable dam or reservoir sites. Alternate projects near Seward on the Big Blue River and Lincoln Creek, and near Dorchester on Beaver Creek were selected to replace those sites found unsatisfactory.

108. Addidtional field investigations of the remaining sites were made in connection with this report, and six sites were selected for more detailed study and surveys. Investigations of foundation and soil conditions were made in order to establish design conditions.

109. Storage allocations for the upstream reservoir projects were based on comparable data utilized for the Tuttle Creek project, and in most of the projects the adopted flood-control and silt capacities equaled or closely approached the maximum practicable storage at the site. The following table lists the upstream reservoirs which have been considered in the various alternate plans:

TABLE 33.—*Dam sites in upper Big Blue River Basin considered in alternate reservoir systems*

Dam site	Stream	Drainage area [1]	County and State	Description
		Square miles		
Waterville	Little Blue	3,364	Marshall, Kans.	Sec. 8, T. 4 S., R. 6 E.
Oketo	Big Blue	4,524	do	Sec. 13, 14, T. 1 S., R. 7 E.
Crete	do	2,624	Saline, Nebr.	Sec. 16, T. 8 N., R. 4 E.
Seward	Big Blue and Lincoln Creek.	1,060	Seward, Nebr.	Sec. 24, T. 11 N., R. 2 E. Sec. 17, 18, 19, T. 11 N., R 3 E.
Dorchester	Beaver Creek	1,243	do	Sec. 5, T. 8 N., R. 3 E.
Wilber	Turkey Creek	460	Saline, Nebr.	Sec. 31, T. 7 N., R. 4 E.

[1] Drainage area not adjusted for upstream reservoirs.

110. In addition to plans involving the reservoir sites listed in table 33, consideration has also been given to the inclusion of a reservoir at the Tuttle Creek site, supplemented by upstream reservoir projects. Reference is made to plate 9 of appendix I, for the location of these sites. Six alternate plans have been considered as described in the following paragraphs:

(*a*) *Plan I.*—Plan I consist of three-reservoir system controlling the runoff from 7,888 square miles of drainage area. This system includes the Waterville Reservoir on the Little Blue River, a short distance above Waterville, Kans., the Oketo Reservoir on the main stem of the Big Blue River near Oketo, Kans., and the Crete Reservoir on the Big Blue River, just upstream from Crete, Nebr. A total flood-control capacity of 1,556,000 acre-feet would be provided, with a silting allowance for 50 years before encroachment on useful storage. Estimates of average annual costs of this system compared to annual benefits show that the plan is not economically justified.

(b) *Plan II.*—Plan II provides for a five-reservoir plan controlling a total drainage area of 7,889 square miles. This plan includes the Oketo and Waterville Reservoirs considered in plan I, but three smaller reservoirs replaced the Crete project. These projects are the Seward Reservoir on the Big Blue River and Lincoln Creek, the Dorchester Reservoir on Beaver Creek, and the Wilber Reservoir on Turkey Creek. Flood-control allocation in the system amounts to 1,653,000 acre-feet, and the silting capacity provides for a 50-year period. Studies indicate that this plan is even less desirable from an economic standpoint than plan I.

(*c*) *Plan III.*—Plan III is similar to plan I with the addition of the Wilber Reservoir. The Wilber site controls a drainage area of 460 square miles and has a flood-control storage allocation of 95,000 acre-feet. The addition of this small project to plan I resulted in decreasing the economic feasibility of plan III from that of plan I, which indicates that the Wilber project has a low economic feasibility.

(*d*) *Plan IV.*—Plan IV consists of the Tuttle Creek Reservoir with a capacity of 1,245,000 acre-feet for flood control, 400,000 acre-feet for conservation of water supply for navigation improvements or other uses, and 185,000 acre-feet for silting, with the Dorchester and Wilber Reservoirs. The total flood-control capacity under this plan is 1,609,000 acre-feet. The combined plan shows an economic ratio of slightly less than 1:1.

(*e*) *Plan V.*—Plan V includes Tuttle Creek Reservoir without allocation of storage for conservation, and the Crete Reservoir. Total flood-control storage amounts to 1,790,000 acre-feet under this plan. The economic ratio is slightly higher than that for plan IV, but still less than 1:1, indicating that the Crete project is somewhat more economical than the combined Dorchester and Wilber projects.

(*f*) *Plan VI.*—Plan VI is similar to plan V, except that conservation storage allocation has been provided in each of the reservoirs. Total storage allocation for flood control amounts to 1,690,000 acre-feet, with 450,000 acre-feet for conservation. The Crete Reservoir as included in this plan is identical in size to the Crete project considered in plan V, but the Tuttle Creek Reservoir has been increased in size to provide additional storage capacity. This modification decreases the economic ratio below that of plan V to 1:0.98.

111. The following table summarizes data relative to storage allocations and reservoir areas for each of the above-described plans. Data pertaining to Tuttle Creek Reservoir are included for ready comparison.

TABLE 34.—*Summary of tentative storage allocations and reservoir areas for alternate Big Blue River Reservoir plans*

Plan and reservoir	Drainage area [1] (square miles)	Tentative storage allocations (thousands of acre-feet)					Maximum reservoir area (acres)	Population in reservoir area
		Flood control		Conservation [2] (acre-feet)	Silting [3] (acre-feet)	Total (acre-feet)		
		Acre-feet	Inches					
Plan I:								
Waterville	3,364	699	3.90	0	66	765	21,000	720
Oketo	1,900	362	3.58	0	37	399	12,600	2,408
Crete	2,624	495	3.53	0	50	545	21,500	608
Total	7,888	1,556			153	1,709	55,100	3,736
Plan II:								
Waterville	3,364	699	3.90	0	66	765	21,000	720
Oketo	1,762	362	3.85	0	37	399	12,600	2,408
Seward	1,060	228	4.03	0	16	244	12,200	300
Dorchester	1,243	269	4.05	0	19	288	12,700	622
Wilber	460	95	3.87	0	7	102	4,600	140
Total	7,889	1,653			145	1,798	63,100	4,190
Plan III:								
Waterville	3,364	699	3.90	0	66	765	21,000	720
Oketo	1,440	362	4.71	0	37	399	12,600	2,408
Crete	2,624	495	3.53	0	50	545	21,500	608
Wilber	460	95	3.87	0	7	102	4,600	140
Total	7,888	1,651			160	1,811	59,700	3,876
Plan IV:								
Tuttle Creek	7,853	1,245	2.97	400	185	1,830	45,550	2,027
Dorchester	1,243	269	4.05	0	19	288	12,700	622
Wilber	460	95	3.87	0	7	102	4,600	140
Total	9,556	1,609		400	211	2,220	62,850	2,789
Plan V:								
Tuttle Creek	6,932	1,295	3.50	0	185	1,480	39,000	1,417
Crete	2,624	495	3.53	0	50	545	21,500	608
Total	9,556	1,790			235	2,025	60,500	2,025
Plan VI:								
Tuttle Creek	6,932	1,245	3.37	400	185	1,830	45,500	2,027
Crete	2,624	445	3.18	50	50	545	21,500	608
Total	9,556	1,690		450	235	2,375	67,000	2,635
Recommended plan:								
Tuttle Creek	9,556	1,600	3.14	495	185	2,280	53,500	2,400

[1] Drainage area adjusted to allow for upstream reservoirs.
[2] For the purpose of this study, conservation storage has been operated for the improvement of navigation conditions on the Mississippi River.
[3] Silting capacity for 50 years with no allowance for reduction from upstream projects, except for Oketo which has been reduced to reflect reduction in silting rate due to Crete.

11. The design of suitable dam structures at the sites mentioned in the foregoing table has been based on the results of underground explorations, determination of spillway design floods by methods comparable to those adopted for the recommended reservoir projects, and land values and relocation costs based on reconnaissance and comparison with similar areas for which detailed investigations were available. Likewise, estimates of the average annual benefits from flood control and increase in low-water flows were computed utilizing available data as to benefits along the Kansas and Missouri Rivers, supplemented by data relative to potential benefits along the Big Blue River. The results of these studies are tabulated as follows:

TABLE 35.—*Summary of costs and benefits for alternate Big Blue River Reservoir plans*

Plan and reservoirs	Estimated costs (thousands)				Cost per acre-foot	Estimated annual cost (thousands)	Estimated annual benefits (thousands)	Economic ratio
	Structures	Land and damages	Relocations	Total				
Plan I:								
Waterville	$17,824	$2,788	$4,049	$24,661	$32	$963	$955	1:0.99
Oketo	15,582	2,320	6,559	24,461	61	985	549	1:0.56
Crete	19,955	4,094	3,014	27,063	50	1,055	875	1:0.83
Total	53,361	9,202	13,622	76,185	45	3,003	2,379	1:0.79
Plan II:								
Waterville	17,824	2,788	4,049	24,661	32	963	955	1:0.99
Oketo	15,582	2,320	6,559	24,461	61	985	527	1:0.54
Seward	14,407	1,400	940	16,747	69	662	402	1:0.61
Dorchester	14,307	1,314	907	16,528	57	656	465	1:0.71
Wilber	8,499	587	140	9,226	90	379	160	1:0.42
Total	70,619	8,409	12,585	91,623	51	3,645	2,509	1:0.69
Plan III:								
Waterville	17,824	2,788	4,049	24,661	32	963	955	1:0.99
Oketo	15,582	2,320	6,559	24,461	61	985	476	1:0.48
Crete	19,955	4,094	3,014	27,063	50	1,055	868	1:0.82
Wilber	8,499	587	140	9,226	90	379	157	1:0.41
Total	61,860	9,789	13,762	85,411	48	3,382	2,455	1:0.73
Plan IV:								
Tuttle Creek	30,618	9,796	13,415	53,829	29	2,113	2,388	1:1.13
Dorchester	14,307	1,314	907	16,528	57	656	402	1:0.61
Wilber	8,499	587	140	9,226	90	379	138	1:0.36
Total	53,424	11,697	14,462	79,583	36	3,148	2,928	1:0.93
Plan V:								
Tuttle Creek	26,525	7,875	11,310	45,710	31	1,779	1,936	1:1.09
Crete	19,955	4,094	3,014	27,063	50	1,055	873	1:0.83
Total	46,480	11,969	14,324	72,773	36	2,834	2,809	1:0.99
Plan VI:								
Tuttle Creek	30,618	9,796	13,415	53,829	29	2,113	2,230	1:1.06
Crete	19,955	4,094	3,014	27,063	50	1,055	870	1:0.82
Total	50,573	13,890	16,429	80,892	34	3,168	3,100	1:0.98
Recommended plan (without seasonal storage): Tuttle Creek	33,140	11,312	25,317	58,459	26	2,252	2,847	1:1.26

113. The results of these studies show that the Tuttle Creek project alone will provide the most favorable plan from an economic standpoint, and this conclusion is further supported by the fact that less land will be required for reservoir use; 53,500 acres being required for Tuttle Creek at full-pool elevation 1136, as compared to a minimum of 55,100 acres for plan I and a maximum of 67,000 acres under plan VI. Equally important is the fact that construction of the Tuttle Creek project at the recommended height would require the relocation of fewer families than any of the alternate plans considered except plan V, which does not provide for conservation storage.

UNITED STATES SENATE,
COMMITTEE ON BANKING AND CURRENCY,
July 20, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
United States Senate.

DEAR SENATOR MCKELLAR: You and the other members of the Subcommittee on Civil Functions were kind enough to grant to the Kansas Senators a hearing for the purpose of presenting to the committee first-hand information about con-

ditions that were developing in practically all of the major watersheds of our State, and to show the necessity for appropriations to get some of these flood-control projects under way.

One of the witnesses was George A. Fox, executive vice president of the Neosho Flood Control Association.

Following his testimony before the committee and immediately upon his return to Kansas, Mr. Fox made a survey of the flood conditions in the valley, and I am taking the liberty of forwarding this to you as corroborative of and as part of the picture that unfolded following this disastrous flood.

Again I want to express to you and to the other members of the committee our deep appreciation for this opportunity given our fellow Kansans to appear, and to assure you of our deep interest and hope that we can start some of these Kansas projects already authorized and recommended by the Corps of Army Engineers, all in the interest of preventing a recurrence of these tragic conditions that followed the Kansas floods.

Cordially yours,

ANDREW F. SCHOEPPEL.

CHETOPA STATE BANK,
Chetopa, Kans., July 17, 1951.

Hon. ANDREW F. SCHOEPPEL,
United States Senator, Washington, D. C.

DEAR SIR: Immediately upon my return from Washington to Chetopa I started checking on the flood conditions on the Neosho Valley which are as follows: Marion, Kans., was under 16 feet of water with no power, lights, water, or gas. Peabody, Kans., Florence, and Cottonwood Falls were all in the same condition and the farm, livestock, and crop destruction was tremendous. All of this territory is in the Cottonwood River Basin and would have been protected by the dams at Marion and at Cedar Point on the Cottonwood River. This was also a part of my testimony before the committee. On the Neosho Basin beginning at Council Grove, as I testified before the committee Saturday morning, Council Grove was completely under water and the destruction to human life, livestock, property was tremendous. I have had no report as yet on the damage at Emporia, Kans.

At Iola, Kans., the power, lights, and water were gone and all communications were completely disrupted. At Burlington, Kans., all utilities, lights, power, water, gas, and telephone communications were completely wiped out for a day or so, and the same conditions existed at Neosho Falls and Chanute (which was very hard hit) Erie, Parsons and Oswego, except the gas lines at Parsons and Oswego were not disrupted. Oswego, Kans., has been without water or sewer service for 5 days and probably will be without water for several more days. At Parsons, Oswego, and Chetopa the water was 9 feet higher than it has ever been known in history. The water was 7 feet deep over United States Highway 166 and covered at least 5 miles east from Chetopa. Northeast of Chetopa there was water and destruction for 14 miles. East of Oswego the water attained a depth of 40 feet and a width of over 8 miles and destroyed everything in its path. This is the worst disaster that has struck eastern and southeastern Kansas since statehood. The town of Miami, Okla., was practically two-thirds inundated and on United States Highway 166, southwest of Miami the water was 16 feet deep. The river has destroyed highways, bridges, and everything in its path from Council Grove to Miami, Okla.

The Kansas ordnance plant located between Parsons and Oswego, Kans., has been out of production since last Saturday morning as it is impossible for the employees to go to work, also they were without power. I testified in May before the House Subcommittee on Appropriations that this would happen to the Kansas ordnance plant should a major flood come down the Neosho River. I was told by the chairman of the committee that they did not need testimony about the defense plants. The B. F. Goodrich plant at Miami, Okla., has been out of operation since last Saturday night on account of power and employees being unable to get to the plant.

It is my opinion that the Oklahoma Senators will gladly join with you in fighting for the flood protection on the Neosho River after this major disaster. The destruction in dollars of this flood alone to the people and communities affected will be more than the estimated cost of the whole Neosho-Cottonwood Dam project.

Since I arrived home from Washington I have flown over a large part of the flood area from Miami, Okla., north to Parsons, Kans., and I can assure you that never in my life have I ever witnessed a similar destructive flood of such magnitude and it is heartbreaking to me when I think that 50 to 75 percent of this destruction could have been eliminated had the Neosho-Cottonwood project been completed.

I would like very much to submit the above information as additional testimony in behalf of the Neosho project, to the Senate subcommittee before which I appeared last Saturday morning.

Respectfully submitted.

GEORGE A. FOX,
Executive Vice President, Neosho Flood Control.

RANDOLPH, KANS., *July 27, 1951.*

Senator KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.:

We wish to protest against Tuttle Creek Dam appropriation. General Pick overemphasized benefits. Kanopolis Dam shows this type dam inadequate. New data on river flow requires new approach stressing upstream structures and conservation.

GLENN D. STOCKWELL,
President, Blue Valley Study Association.

RANDOLPH, KANS., *July 29, 1951.*

Senator KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.:

We, a group of women living outside the Tuttle Creek area, feel Tuttle Creek Dam inadequate for a flood of this proportion. Excessive rainfall has saturated ground. Ninety percent of upland basements flooded. We practice soil-conservation methods sufficient for ordinary years. Our soil losses on the Blue River watershed exceeded many times the property damages. Therefore we urge an upstream water-control program.

WEST LEONARD HDU,
MRS. SUSAN OMAN, *President.*

RANDOLPH, KANS., *July 29, 1951.*

Senator KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.:

Army engineers' report on Kanopolis Dam proved erroneous. Check official log of Kanopolis Dam during week of flood. Salina, Kans., flood was worst in history and in spite of Kanopotem. Pick-Sloan plan is not correct answer for flood control. There are better ways. Check of official discharge of Blue, Republican, Solomon, and Kansas Rivers will disprove statement that Tuttle Creek and Milford Dams would have prevented flood. Tuttle Creek appropriation biggest boondoggle ever known to Middle West. Meeting in Kansas City July 25 well-oiled steamroller ever organized. All opposition flattened. Upstream opponents call Tuttle Creek the Kansas City gravy dam. Appreciate your help to stop appropriation for Tuttle Creek Dam until further complete study can be made.

GLENN D. STOCKWELL,
President, Blue Valley Study Association.

MANHATTAN, KANS., *July 27, 1951.*

Hon. KENNETH MCKELLAR,
Senate Office Building, Washington, D. C.:

I am aware of the contents of telegrams sent certain Members of Congress today by G. D. Stockwell of the Blue Valley Study Association protesting any appropriation for flood control at Tuttle Creek on the Blue River. As mayor and

representing the city commission of Manhattan as well as a group of business interests in the city who lost heavily in the recent flooding which cost the city of Manhattan its business interests and residents more and $22 million and an additional $3 million to farms in Riley County alone I was happy to act as chairman of the representative group from the various river valleys in the Kansas Basin making up the membership of the resolutions committee at Kansas City the 25th and as chairman of that committee can assure you no one was denied an opportunity to appear before the committee. No attempt was made by the Blue Valley Study Association or any other minority group opposing flood control to appear before the committee to present their case. Much of the contents of telegrams sent you by the Blue Valley group if not a deliberate untruth is a gross misrepresentation not based on the facts. I have personally seen more land permanently ruined in the Kansas Valley in the immediate area than is involved in the Tuttle Creek project. The selfish interests of a small minority group in the Blue Valley have prevailed far too long and must no longer be permitted to delay the prevention of such staggering losses, tragedy, and misery resulting from such a disaster which except for such senseless opposition could and would have been prevented. With the remedy known and in the hands of Congress it must never again occur.

J. R. HOOK, *Mayor.*

FISH COMMISSION OF OREGON,
Portland, Oreg., July 16, 1951.

COMMITTEE ON APPROPRIATIONS FOR WAR DEPARTMENT CIVIL FUNCTIONS,
United States Senate, Senate Office Building, Washington, D. C.
(Attention: Senator Kenneth McKellar.)

GENTLEMEN: Since appropriations for the proposed Ice Harbor Dam on the lower Snake River are being considered by the Committee on Appropriations for War Department civil functions, it is appropriate that the fisheries problems inherent in the construction of this and certain other dams on the Columbia and Snake Rivers be brought to your attention. The Oregon Fish Commission's technical staff has been actively studying these problems for several years in cooperation with the staff of the Washington State Department of Fisheries.

The Fish Commission of Oregon is charged with the responsibility for regulating, protecting, and preserving the fisheries of the State of Oregon. The immediate problem facing not only the State and Federal fisheries agencies but also the people of the Northwest and the Nation through their representatives in Congress is whether or not Ice Harbor Dam should be built. The site of this proposed dam is only a few miles above the mouth of the Snake River and all runs of salmon to the Snake must surmount that dam.

The Snake River is by all odds the most important tributary of the Columbia from the standpoint of fish production. Its runs are not only good, but involve the choicest species and races. Roughly half of the entire population of spring Chinook salmon may be found in the Snake and its tributaries. Its fall Chinook runs are flourishing and most of the upriver steelhead migrate into the Snake.

RELATION OF ICE HARBOR TO OTHER DAMS

The United States Army engineers' "308 Report," dated October 1, 1948, recommends, in addition to numerous other structures, the erection of four dams on the Snake River below Lewiston, Idaho, namely: Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams. These barriers will each be approximately 100 feet in height. Individually they present a very serious threat to the migrating salmon. Collectively they may well mean the doom of all salmon and steelhead now spawning in the superb areas above.

Before proceeding further it is well to point out that Ice Harbor Dam alone will not suit all the purposes for which it is being installed. One of its primary purposes is to provide a link in navigation up to Lewiston, Idaho, and without the three other proposed dams on the Lower Snake it is probably not justified. It is necessary, therefore, when considering the impact of Ice Harbor Dam on the Columbia River fisheries to consider the three other proposed lower Snake dams at the same time.

The height of Ice Harbor Dam relative to the highest now being surmounted by large runs of salmon (Bonneville) should not be overlooked. Whereas the head differential at Bonneville is about 62 feet, it will be 90 feet at McNary, 100 feet at Ice Harbor, 93 feet at Lower Monumental, 100 feet at Little Goose, and 82 feet at Lower Granite. No one knows how high a dam may be built and still

make it passable to salmon and steelhead, but all competent fisheries authorities are very apprehensive of the survival of salmon runs above any dam exceeding the height of Bonneville. The factors involved are covered more fully elsewhere in this discussion.

Ice Harbor is not an important source of power and its power output, if constructed, will be a small part of this produced in the Columbia Basin. Its proximity to the Hanford works is of some significance, but McNary Dam, which will produce much more power, is only a short distance from Hanford also. McNary Dam has been under construction for several years and will soon produce power.

SNAKE RIVER SPAWNING AREAS

The exact distribution of anadromous fish to the various spawning grounds of the Snake is not known and varies somewhat from year to year. Nevertheless recent field studies have thrown much light on this subject. In the first place a very large part of the salmon and steelhead of the Snake now spawn above the four lower Snake Dam sites. The only significant tributary whose mouth is within the area of the four dams is the Tucannon River, which empties into the Snake about midway between the upper and lowermost dams. There are no tributaries below the lowest dam, i. e., Ice Harbor. It may be safely stated that about 95 percent of Snake River chinooks and steelheads now spawn above all four dam sites.

FISHERIES PROBLEMS AT DAMS

There are a number of sources of mortality to anadromous fish associated with high dams (all four lower Snake dams are high in this sense), the most important being: (1) Blocking migration of adults, (2) the loss of young in passing down, and (3) inundation of spawning grounds.

The history of dam construction indicates that their erection usually means the end of salmon runs above. This has happened at innumerable barriers on the Pacific coast. The operation of the fishway at Bonneville and the history of the fish runs there does, indeed, indicate that dams may not mean the end of individual salmon runs. Nevertheless, delay and losses do occur to adults at Bonneville. The four lower Snake dams will be much higher (Bonneville is about 62 feet high in terms of head differential) and even if the fish can surmount these, which is problematical, these problems will be more acute. The cumulative effect of high dams on the adults may well be geometrical and not merely additive. Extended delay in reaching the spawning grounds becomes a source of mortality, and delay can be demonstrated at Bonneville. Studies on the Fraser River indicated that a delay of more than 2 weeks on the part of migrating sockeye (blueback) salmon is serious. Fish arriving at Ice Harbor Dam may already have been delayed an average of 2 weeks by barriers below. This phase of the problem would probably be most serious with fall chinook salmon, which normally spawn very soon after arriving at their spawning grounds.

Young salmon experience severe mortalities upon going through turbines where sharp pressure changes or mechanical injury are encountered. Serious losses due to sharp pressure changes are anticipated at the four lower Snake dams. The United States Fish and Wildlife Service has stated that mortalities of about 15 percent occur among downstream migrants at Bonneville. Surely they will be higher at each of the lower Snake dams. If the losses among downstream migrants be 25 percent, what is the outlook? Out of each 1,000,000 fingerlings approaching the uppermost dam (Lower Granite), some 750,000 would survive this obstacle. At this rate the number surviving below each structure would be approximately as follows: Little Goose, 562,000; Lower Monumental, 422,000; Ice Harbor, 316,000. Collectively these structures would, if this reasoning be correct, eliminate almost 70 percent of the young.

It must be remembered that the young will face additional man-made dangers, such as McNary and Bonneville Dams, as they migrate on down the main Columbia.

In general, salmon must spawn in running water. When important spawning grounds are inundated, the fish must go elsewhere or die unspawned. Salmon have a pronounced tendency to use their ancestral spawning grounds. They must usually be forced to go elsewhere and this usually entails substantial losses in the runs. Present trends of dam construction indicate that the areas

considered as "elsewhere" are diminishing to the point of nonexistence in the Columbia Basin.

HATCHERIES

The question often arises, "Why not handle the blocked fish in hatcheries?" There is not even a remote possibility that such an operation could be successful. The total number of salmon and steelhead involved is greater than are handled in all the hatcheries in the entire world at the present time. Big hatcheries in Oregon now have about 30 ponds; yet to handle the number of fish involved in salvaging the Snake runs, some 7,400 ponds would be required. Without going into the insurmountable water supply, disease, and food and physical problems involved it can be said that salvaging and maintaining the Snake runs by artificial propagation is utterly impossible.

SALMON RUNS

Estimated average salmon runs to the Snake in recent years are as follows: Chinook, 135,000; silver salmon, 2,000; steelhead trout, 65,000. From these runs there is an annual harvest of about 12,000,000 pounds of prime food fish, valued in excess of $9,000,000.

STUDY REQUIRED

Before Bonneville Dam was built, it was unusual for a major dam to be equipped with anything approaching adequate fishways. Many new features were tried at Bonneville. Some worked—others did not. Many problems, particularly those relating to downstream migrants, remain unsolved.

Today McNary Dam is under construction. McNary is higher and longer than Bonneville and fish reaching there will have less reserve fats to act as a buffer if they are delayed. New problems at McNary call for new developments and many are being incorporated into the fisheries facilities at the dam. Much was learned from operations at Bonneville and much more can be learned. Many mistakes at Bonneville have been rectified at McNary. It follows that there is a much greater chance to maintain Snake River fish runs if the experience soon to be available at McNary is on hand. Such experience may point the way to protecting Snake River runs even with the four lower dams in place. On the other hand it is certainly true that adequate protection of the vital Snake fisheries may mean that no lower Snake dams can be built.

LIFE HISTORY

Pacific salmon and steelhead trout spawn in such streams as the Snake and its tributaries, selecting shallow, well-graveled, riffle areas in which to lay their eggs. The eggs are placed in the gravel of the stream bed and covered over for protection. After a few months the young hatch and eventually work their way out of the gravel. In their first or second spring the young fish drop down the streams and eventually out into the Pacific Ocean. There they remain for varying periods and then the adults reenter the Columbia in the spring, summer, and autumn of their final year. The fish then swim up the Columbia, up the Snake, and into the very areas where they were born.

Up-river races, such as those of the Snake, are equipped for a longer journey than fish of the lower Columbia. They have more fat and are generally of superior quality to fish spawning nearer the sea. The fall run enters the Columbia in a large group in late August, and the lower river fish soon depart from the main river and soon begin spawning. The up-river fish continue on up to the headwaters and spawn in late October and November. Up-river fish are not adapted to lower-river conditions and vice versa, each race being peculiarly fitted to make the migration that its ancestors have made for untold centuries.

These considerations and much experience on the part of fisheries investigators result in one conclusion—the perpetuation of Snake River runs can only be assured in the Snake River itself.

To summarize I should like to reiterate that the Columbia and Snake River salmon runs are well worth protecting. The Nation simply must not repeat the mistakes that have needlessly destroyed some of its resources.

At this writing the unprecedented June chinook and blueback salmon runs that were so widely heralded at Bonneville Dam are being blocked very seriously

at McNary Dam, which is 150 miles further upstream and is partially built. Serious mistakes in design were made by the Corps of Engineers resulting in the failure of two of three temporary fishways. Obviously McNary is a threat to the fish now searching for a way to pass, and quite obviously, there is much yet to be learned about safeguarding Columbia River salmon at dams. This is no time to build Ice Harbor, even if justified, if the great Columbia River salmon runs are to be protected.

There are other sources of power and other desirable dam sites. Ice Harbor Dam cannot be built at this time without jeopardizing this most important contributor to the Columbia River fishery resource.

The fish directly threatened are the seed stock from which a vast harvest can be made. On their survival much of the troll fishery and close to half of the Columbia River commercial and sports fisheries depend.

I earnestly request that the Committee on Appropriations for War Department Civil Functions carefully weigh the values and alternatives from all standpoints and that it not recommend appropriation of funds for the construction of Ice Harbor or any other dam on the lower Snake River.

Yours very truly,

JOHN C. VEATCH,
Chairman, Fish Commission of Oregon.

STATEMENT OF JAMES H. CELLARS, EXECUTIVE SECRETARY, COLUMBIA RIVER SALMON AND TUNA PACKERS ASSOCIATION

The membership of the Columbia River Salmon & Tuna Packers Association includes individuals, companies, and corporations engaged in the business of canning, processing, freezing, marketing, and distributing, fish and other water-food products. The membership, in the course of its regular business, processes over 90 percent of the commercial salmon catch of the Columbia River.

This association protests current proposals before Congress for the appropriation of Federal moneys for the construction of Ice Harbor Dam on the Lower Snake River in the State of Washington for the following reasons:

1. The construction of Ice Harbor Dam cannot be economically justified without the construction of four other structures on the Snake River; namely, Lower Monumental Dam; Little Goose Dam; Lower Granite Dam; and Hells Canyon Dam. The construction of these dams across the Lower Snake River will result in terrific damage to the Columbia River salmon fishery resource and the practical elimination of the river salmon fishing industry.

2. There does not exist at this time any necessity for the initiation of the construction of these dams upon the basis of:

(*a*) National defense
(*b*) Production of hydroelectric power
(*c*) Establishment of a river navigation system
(*d*) Reclamation of arid lands
(*e*) Flood control

3. Available Federal funds for Columbia Basin development should be so appropriated as to assure the earliest possible completion of projects now underway rather than be spread among old and new projects.

THE COLUMBIA RIVER SALMON RESOURCE

There are four major salmon resources in the world today. Only three are available to the Western World. They are the Alaska resource; the Puget Sound resource; and the Columbia River resource. The fourth is in the area of the Kamchatka Peninsula and tightly shut behind the iron curtain. It should be noted in this instance that should this country become involved in a war with Soviet Russia that it is considered probable that operations in the most productive areas in the Alaska fishery would cease at once.

The Columbia River salmon fishery resource, according to published reports of the United States Fish and Wildlife Service (appendix P, Review Report of the Columbia River and Tributaries, Corps of Engineers, Department of the Army, October 1, 1948), produces an annual revenue of $17,440,000 per year. This figure is based upon the first processing level for the commercial pack which is credited with an annual revenue of $13,700,000 a year. This figure should be appreciated 30 percent to reflect the final value of this pack at retail

level, thus bringing the total annual return from the resource to $21,500,000 a year. If this revenue is calculated on the basis of a 4-percent return, it reflects a capital value of $537,500,000. This resource has been utilized for almost a century and in that period has produced well over a billion dollars in new values.

This resource has another value apart from that that can be set by affixing a dollar mark. It produces, according to the United States Fish and Wildlife Service, approximately 35,000,000 pounds of protein food annually. Protein food is essential to the life and well-being of the human race. Our economists declare that it is one of the most scarce commodities in the world today and they unite in the prediction that this scarcity will increase rather than diminish in future years. Food supply is particularly valuable in time of war. Our amazing production standards are based upon the performance of citizens of the best-fed nation on earth. We cannot afford to sacrifice this national asset to provide power that can be obtained elsewhere or to provide a free highway for a few barge operators.

The resource supplies an income in whole or in part for more than 15,000 people residing in the Pacific Northwest.

It provides the principal subsistence for many Indian tribes residing in the area. When these Indians deeded their tribal lands to the citizens of this Nation one of the considerations was retention of their right to take for their needs from this food supply.

It provides recreation for many thousands of sports fishermen.

DAMAGE THREAT DEFINITE

Our contention that Ice Harbor and companion dams proposed for the Lower Snake River will cripple the salmon resource is supported by informed sources with no selfish interest in the fishery.

We will quote from the Review Report of the Columbia River and Its Tributaries noted in a preceding paragraph, appendix P, page 101.

"The Lower Snake dams, collectively, present the greatest threat to the maintenance of the Columbia River salmon population of any project heretofore authorized or constructed in the basin."

In March of 1947 Mr. William Gardner, Assistant Secretary of the Interior, in a Department memorandum dated on March 24 of that year quoted the United States Fish and Wildlife Service as the authority for a statement to the effect that construction of he Lower Snake dams would eliminate 75 percent of the salmon.

The context, particularly that in the Review Report, indicated that these statements were made on the basis of modern fish-passage facilities being included in this construction.

These contentions will be fully supported by the Oregon Fish Commission and the Washington Department of Fisheries in statements which they are now preparing to submit to your committee.

You may ask why the salmon runs cannot be preserved by the incorporation into structures such as that proposed at Ice Harbor of facilities to pass the fish up and down. The truth is that, despite years of study and the expenditure of millions of dollars, we have only progressed as far as a fairly satisfactory method of passing salmon over a dam up to 60 feet high and have not made any satisfactory progress toward getting the little fish down again without a minimum loss of 15 percent. The dams also have a damaging effect on salmon runs other than the mere passage.

These contentions are borne out by recent action by Mr. Albert M. Day, Director of the United States Fish and Wildlife Service. Mr. Day called a meeting in Seattle, Wash., late in June of this year. This meeting was attended by top biologists of his Department and biologists of the Fish and Game Commissions of the States of Oregon, Washington, and California. The purpose of this meeting was to initiate studies to discover, if possible, a feasible way of passing fingerling salmon down over high dam structures. We again call your attention to the statements of the Washington Department of Fisheries and the Oregon Fish Commission which contain in detail the reasons why high dam structures are severely damaging to anadromous fish.

THE LOWER SNAKE DAMS

The sites of four of these dams, of which Ice Harbor is proposed as the first unit, are on a comparatively short stretch of the Snake River (113 miles) between Pasco, Wash., and Lewiston, Idaho. The original act authorizing construction of these dams and subsequent reference to them in the River and Harbor Act of March 2, 1945, indicates clearly and definitely that the principal reason advanced in requesting this authorization was the establishment of a river navigation channel between the mouth of the Snake River and Lewiston. While the covering guise of power is now advanced as the basis for their construction, much if not most of the urgence for these projects comes from navigation interests such as the Inland Waterways Association, an organization we understand that has been represented before this committee by Mr. West and Mr. Baker.

It is notable that in the brochure supporting the Ice Harbor appropriation entitled "Power for Defense" that no attempt is made to defend the Ice Harbor appropriation by itself. Instead the entire argument ties in Ice Harbor Dam with The Dalles Dam on the lower Columbia and Hells Canyon Dam on the upper Snake, a structure not even authorized to date. The proponents of Ice Harbor have taken this clever method of concealing the small benefits that can be expected from that structure as a unit and instead have added these small benefits to the larger ones they indicate will result from the construction of the two larger structures.

As it is obvious that one dam or two or three will not accomplish the purpose of creating a navigable channel up the tortuous bed of the Snake, we call to your attention that once construction is initiated on the first unit that the Congress is pracically committed to, instead of building one dam, the construction of four dams, all with nominal power potentials, at a cost of close to $1 billion. We understand from testimony given last year before the Senate Committee on Appropriations that dam No. 5, Hells Canyon, is also tightly tied into this unit on the basis that the four lower Snake dams are not economically feasible without Hells Canyon Dam, and Hells Canyon Dam is not economically sound as a project without the existence of the four lower Snake dams. In view of the apparent impossibility of unscrambling this economic omelet, we must extend our opposition to the Hells Canyon proposal.

We have tried to outline the value of the salmon resources, its vulnerability to high dams erected in the path of the migrations of this great food fish, and the fact that an initial appropriation for Ice Harbor Dam, is in fact an initial appropriation for five great structures whose total cost will involve huge expenditures. We will not attempt to say how much on the basis of estimates. When the Congress was first asked to make the initial appropriation for McNary Dam the "estimated" cost was $49,000,000. When McNary Dam is completed you will have spent almost $300,000,000 on the project.

THE NAVIGATION FACTOR

Waterway navigation has been a mode of transportation on the Columbia River for many years. For many years it was the principal method of transportation between Astoria at the mouth of the river and Portland, Oreg., a distance of about 100 miles. Today, although a navigable channel sufficient to pass oceangoing vessels exists, there is no line operating on a freight basis between these two points. When the Celilo Canal was built in 1915 it was hailed as the beginning of the existence of a great transportation system. Actually during the next 25 years the average tonnage passing through this canal was about 10,000 tons a year. It could all have been hauled in one 40-foot barge.

In 1940 tonnage increased as navigation interests were able to capture the business of transportation of petroleum products to the interior, and by 1947 traffic reached a total of some 900,000 tons. It is and has been, however, a peculiar traffic. In each year since 1947 over 98 percent of the traffic has been one-way traffic, that is, upstream, although the area between Portland, Oreg., and Pasco, Wash., traversed by the barge lines, taps a great grain-producing country. In addition, in each of these years the ratio of petroleum products carried to other normal traffic has been from 88 to 95 percent of the total.

Last fall the Standard Oil Co. of California completed a common user pipe line from Salt Lake City to Pasco, Wash. In 1950 traffic on the river barges

dropped to 848,148 tons from 912,582. There can be no argument that petroleum products can be moved into this area more cheaply by pipe line than by barge line.

What is going to happen to the tonnage of these lines? Some have seen the handwriting on the wall and are turning their efforts to ocean and coastal towing jobs. Are you going to build a vast navigation system that will have no business?

Are these inland waterways, under such circumstances, of real benefit to the public for the dollars put into them? The report of the President's Water Policy Commission recently published indicated this possibility on the ground that the consuming public would get the benefit of lower rates made possible because the barge lines would have publicly paid for right-of-way with no tolls to pay.

In 1948 with barge lines hauling practically all the petroleum products carried into this area we made a check of retail gasoline prices paid by the public in Spokane, Wash., as compared with the price paid in Portland, Oreg., where the barge hauls originated. Although the barge lines had taken over 90 percent of the business away from the rail lines by quoting lower rates, the Spokane consumer paid just 2.8 cents per gallon (41 cents per 100 pounds) more than the Portland consumer. That difference reflected exactly the rail rate on that product from Portland to Spokane. We ask what was the benefit to the public?

In conclusion we can add that exhaustive Government studies of Government subsidized river navigation projects do not indicate that real benefits have been attained.

We quote from House Document 159, Public Aids to Domestic Transportation, a report to the Seventy-ninth Congress from a board of investigation appointed under the Transportation Act of 1940, page 70.

"Savings to water way users: Benefits from improved waterways have been commonly measured in terms of the transportation savings, which are or may be realized by those who use the waterways. Such estimated savings are calculated as the difference between what shippers would pay for transportation by some other means, usually by rail, and the charges, or operating costs borne by shippers who use the waterways which are imprived and maintained at public expense. While the procedure is useful in appraising projects under existing waterways policies, it must nevertheless be stressed that the 'savings' referred to are not real economic savings such as would indicate the comparative economy of waterway transportation. They result largely, or wholly, from a shifting of transportation costs from the shippers to the taxpayers, who instead bear the hidden costs of navigation improvements and their maintenance."

THE NAVIGATION FACTOR

Ice Harbor does not have a large power potential. If and until Hells Canyon Dam is built, its highest rated capacity will be 195,000 kilowatts. It is not located near any large center of industrial use. It is near the Hanford atomic plant but so is McNary Dam which will be in production 2 years before Ice Harbor. It is presently estimated that Ice Harbor, if constructed, will have a potential of 130,000 kilowatts by 1956. By that time McNary Dam, according to schedule, would be producing 560,000 kilowatts which would afford an adequate reserve for Hanford. It would be far less costly to build a separate line from McNary to Hanford than to build Ice Harbor Dam merely to provide Hanford with a power supply apart from that of the general lines of the Northwest power pool.

By 1957 power production at Ice Harbor is expected to be up to 195,000 kilowatts according to current estimates. This output may be slightly increased when and if Hells Canyon Dam is completed. Compare this small production with that of McNary Dam which when completed will produce 980,000 kilowatts, Chief Joseph Dam which will produce 1,152,000 kilowatts, and Hungry Horse which will produce directly and indirectly some 400,000 kilowatts.

To summarize the entire picture, we will point out that the available power supply in the Pacific Northwest today from both public and private facilities exceeds 4,000,000 kilowatts. The Federal program covers some 30 additional dams beyond those already completed. Nine are under construction. Fifteen have been authorized for construction. Six have been recommended for authorization. We wish to point out that of these 30 dams only 8 are so located as to interfere with the fishery resource.

The four lower Snake dams, including Ice Harbor, which are the only ones on the Snake River presently authorized by Congress will produce, when completed, a total of approximately 700,000 kilowatts. On the other hand, Federal

projects under construction, authorized projects not objected to by the fishery and recommended projects in the same category, would produce 3,921,600 kilowatts. When you add to this figure the 500,000 kilowatts now under development by private companies, the figures will indicate that the power potential of the area may be doubled without building any of the structures protested by the fishery.

Much is being said about the necessity for speed in obtaining production of power in this area because of defense needs. We present herewith a list of projects, Federal and private, all of which can be brought into initial production by 1954 or 2 years before Ice Harbor Dam. We list these projects with their locations, power potentials, and estimated initial production dates. Some of these duplicate dams already mentioned, this list being classified as to production dates. None of these dams are objected to by the fishery.

Project	Location	Stream	Ultimate installed capacity 1,000 kilowatts	Date of initial operation
Chief Joseph	Washington	Columbia	1,152	December 1954.
Albeni Falls	do	Pend Oreille	43	January 1954.
McNary	Washington-Oregon.	Columbia	980	December 1953.
Cabinet Gorge	Idaho	Clark Fork	100	January 1954.
Lookout Point (Meridian).	Oregon	North Fork, Willamette	115	July 1954.
Dexter	do	do	15	Do.
Palisades	Idaho	Snake	112.5	April 1954.
Upper Scrivner	do	Scrivner Creek	30	December 1953.
Lower Scrivner	do	do	90	Do.
Garden Valley	do	South Fork, Payette	60	September 1954.
Lucky Peak	do	Boise	20	June 1953.
American Falls	do	Snake	30	May 1953.
Rock Island	Washington	Columbia	200	September 1952.
C. J. Strike (Hopkins Ferry).	Idaho	Snake	82	Do.
Dike	do	do	50	Do.
Guffy	do	do	30	July 1952.
Kerr	Montana	Flathead	168	October 1953.
Thompson Falls	do	Clark Fork	75	Do.
Sultan	Washington	Sultan	110	September 1953.
Box Canyon	Idaho	Pend Oreille	60	
Hills Creek	Oregon	North Fork, Willamette	20	July 1954.
Warm Springs	California	Klamath	30	September 1952.
Iron Gate	do	do	9	Do.
Big Bend	Oregon	do	50	September 1953.
Boundary	Washington	Pend Oreille	276	December 1953.

The power potential of these structures is approximately 3,927,000 kilowatts, almost equal to the present production of the entire area.

Compared with these possibilities in total or in date of initial production, we can see little justification for the initiation at this time of construcion of Ice Harbor Dam and its associate structures, which threaten the loss of two-thirds of the Columbia River salmon resource. The ratio of benefits to cost of Ice Harbor Dam has been charged so rapidly that we do not dare quote it with any assurance. Three years ago the ratio of annual benefits to cost was 0.81 to 1. Today as pressure from special interests to build this dam has increased the ratio has changed to favor benefits. We urge your study of present figures available to you and not to us, and ask you to note if annual damages amounting to $9,000,000, the loss to the fishing industry if these Snake River dams are built, or any portion of this loss, has been included in reaching these figures.

FLOOD CONTROL

We contend that Ice Harbor Dam and its associated dams on the lower Snake River are not and are not claimed to be flood-control factors of any major importance in the basin development program.

RECLAMATION

No large reclamation factors are involved in the construction of Ice Harbor and associated dams. Many thinking people in this area believe that the impact

of the production from the still barely initiated million acre Grand Coulee project should be studied in relation to its effect upon the agricultural economy of the area before further major projects are begun.

NATIONAL DEFENSE

We cannot believe nor have we been convinced by any evidence presented to date that the 195,000 kilowatts of electric power Ice Harbor Dam might produce by 1956 would have the slightest traceable effect upon our national defense program. According to the Federal Power Commission the capacity of power producing plants in the United States as of February 28, 1951, was 69,420,643 kilowatts. Ice Harbor in production would add less than two-tenths of 1 percent to this total. We cannot believe that any thinking person could consider as sound any statement that the lack of or addition of two-tenths of 1 percent of this Nation's present power potential could in any way have any material effect upon our national safety.

Balanced against the probable loss of some millions of pounds of fine protein food, Ice Harbor's value to national defense cannot stand scrutiny. More power closer to large user centers can be obtained far more quickly by spending all available Federal funds to insure the rapid completion of projects now under way. This time of drain upon the Federal Treasury for direct war efforts, of pressure upon the taxpayers to support a mounting load of public debt, is no time to divert Federal funds for starting on a project that can only be characterized as insignificant in relation to the all-over scope of our war effort.

Ice Harbor cannot come into production until 1956. If our defense situation is not resolved by that time, is it not reasonable to suppose that it will be because we are engaged in a struggle of such desperation and effort that neither the time, men, or materials could be devoted to the completion of a hydroelectric dam with a capacity of only 195,000 kilowatts.

We must contend that any claims that Ice Harbor Dam, with its small power potential and lack of any other claim to public benefit until four other dam structures are initiated and completed, is in any way vital or necessary to insure our national safety are sheer nonsense and must so be regarded by any thoughtful person aware of the facts.

THE ECONOMIC FACTOR

While the requested appropriation for Ice Harbor Dam is not large, it must be considered as a pledge to spend hundreds of millions of dollars to complete this dam and the associated projects without which this structure itself cannot be regarded as an economically sound endeavor. The taxpayers of this country are already murmuring under heavy tax burdens. The thrust of taxes against the average income of the American citizen is becoming intolerable. It is becoming daily more evident that unless some relief is granted that the people of this Nation will be forced into a drastic change in the mode of living which they have been led to expect to be theirs. In view of these circumstances, it appears to us to be extremely unwise to initiate the construction of these lower Snake dams. If new projects must be initiated in this area, it would be far better to erect them on the main Columbia, where the head of water would benefit the dams constructed below.

In this connection we suggest the Libby project, which will store 4,620,000 acre-feet of water. This stored water proceeding down the Columbia will greatly increase production at Grand Coulee, Chief Joseph, McNary, and Bonneville. This dam alone and its stored water will add 1,133,000 kilowatts to the power supply of the area.

It should be understood that there does not exist a continuous power shortage in this area. Dr. Paul Raver, Administrator of the Bonneville Power Administration, declared in a recent talk at a conference called by Governor Langlie, of Washington, that this area had "interruptible power running out of its ears." In other words, there do exist in the Northwest at this time generators sufficient to more than adequately supply the area with necessary power. The trouble is with the water supply, and we believe that efforts should be concentrated on building dams in the upper reaches of the basin which will through large storage potentials be able to firm up the water supply and consequently the power supply.

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POSITION OF THE FISHERY

We, who are interested in the preservation of the Columbia River salmon resource, and there are many thousands not directly connected with the industry who join with us in our thinking, do not contend that we can stand in the path of the reasonable development of this area or in the way of any project vital to our national safety.

We do contend that this great natural resource should be preserved as long as is reasonably possible.

Time may bring many changes. Any demand for the projects which would destroy the salmon runs may pass.

The runs may fail to pass up and down over McNary Dam which closed across the Columbia this past winter. If this should happen, this problem would be sadly solved. Perhaps experience gained at McNary Dam will lead us to the knowledge necessary to pass the salmon migrations safely over such structures. This was the thinking which led the conference committee of the Congress in 1950 to disapprove an initial appropriation for this structure. If it was sound then, it is not sound today in view of the facts.

Atomic-power methods may be developed within a few years that will lead to the economical production of electric power by heat generated from fissionable materials. In such a case power could be brought to industry rather than industry having to follow power, making this vast network of costly dams unnecessary.

The Columbia River salmon resource is a virile resource. Left alone; given a chance to adapt itself to anything like its natural habitat it will return year after year, replenished by nature, as it has for past centuries. Destroy it and it is gone forever.

We ask you to protect this great gift of nature. It can be protected without any sacrifice of the reasonable development of the Pacific Northwest area and without in any way endangering our national safety.

We respectfully urge that you do not initiate its decimation by approving at this time an appropriation for the construction of Ice Harbor Dam.

LEWISTON, IDAHO, *July 9, 1951.*

Senator KENNETH D. MCKELLAR,
Chairman, Subcommittee on Civil Functions, Appropriation,
United States Senate, Washington D. C.:

National defense agencies agree additional power essential to national defense effort. This power to be available in Pacific Northwest. State of Idaho urges your committee to approve appropriation for $17,390,000 for Chief Joseph Dam, $42,900,000 for McNary Dam, $10,000,000 for Albeni Falls Dam to keep these projects on speed-up program. We also urge the appropriation of $4,000,000 for initiation of construction of Ice Harbor Dam. Planning and design complete for Ice Harbor and construction could start at once. These projects essential to national emergency and peacetime economy all above projects approved by Bureau of Budget and recommended by President of the United States.

LEN B. JORDAN,
Governor, State of Idaho.

LEWISTON, IDAHO, *July 9, 1951.*

KENNETH D. MCKELLAR,
Chairman, Committee on Civil Functions, Appropriations,
Washington, D. C.

Lewiston (Idaho) Chamber of Commerce urges your consiredation of the recommendation made by Governor of Idaho concerning appropriations for dam projects as outlined in his telegram to you of July 9, 1951. Projects recommended would be considered essential to national emergency as well as peacetime economy.

CHAMBER OF COMMERCE,
Lewiston, Idaho.

OLYMPIA, WASH., *July 9, 1951.*

KENNETH MCKELLAR,
STYLES BRIDGES,
Senate Appropriations Committee,
Senate Office Building, Washington, D. C.:

On several occasions in the past I have appeared before committees of your legislative body urging national appropriations for an integrated program of development of the resources of the Pacific Northwest; the import of full and speedy development of the hydroelectric power resources in our area of the country cannot be stressed too strongly. Recently several large defense industries, using a tremendous amount of hydroelectric power have been located in the State of Washington. As our part of the national defense program we are doing everything possible to cooperate with these industries. It is our desire to contribute to the utmost in the over-all defense program. The location of certain defense industries in our area is however bringing about the danger of a power shortage to our economy; certain long-time established industries employing large numbers of people may well suffer curtailment and actual shut-down if more hydroelectric power is not made available as soon as possible. I contact you again therefore to urge that the maximum appropriation possible be made by the United States Congress to support an integrated program of hydroelectric-power development consistent with the over-all conservation of our resources.

ARTHUR B. LANGLIE,
Governor of Washington.

THE COMMISSION OF PUBLIC DOCKS,
Portland, Oreg., March 27, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR SENATOR MCKELLAR: The Commission of Public Docks of the City of Portland is very much interested in the development and improvement of navigation on the Columbia River as an important part of port development.

In this connection, it was extremely gratifying to read of the President's recommendation in his budget message to the Congress on January 15 that appropriation of $4,000,000 be made to initiate the construction of Ice Harbor lock and dam and $18,000,000 for The Dalles lock and dam. Ice Harbor Dam is the first step in extending navigation up the Snake River, which will reach large tonnage areas of wheat and other commodities, and its construction will be most important for the continued development of Portland and the lower Columbia River cities as major ports, as well as being the next step in the orderly development of the Columbia Basin dam program under the 308 report.

The commission, after discussing the matter, directed that I write urging your wholehearted support of these projects, and that you be advised as to their views.

Thanking you for your anticipated cooperation and consideration of this matter, I remain

Very truly yours,

JOHN YOUELL,
Chairman, The Commission of Public Docks.

RESOLUTION REGARDING ICE HARBOR AND THE DALLES DAMS

Whereas hydroelectric power in tremendous quantities is the chief contribution of the Northwest to the national economy in war or peace, and this power contributed in large measure to the victory of the democratic peoples in World War II, and due to industrial and agricultural development and a sharp increase in population the existing power-generating facilities have been burdened to such an extent that power is being allocated and certain new industries have been unable to locate in the area because of a power shortage; and

Whereas this country is now engaged in a stepped-up defense program and all-out war is a definite possibility, and additional power facilities are badly needed for the defense effort and would be absolutely essential in the event of war; and

Whereas engineering and planning for Ice Harbor and The Dalles Dams are complete and construction can be started immediately upon appropriation of funds; and

Whereas the cost of these dams will be an investment that will be returned to the Government with interest through the earning capacity of these facilities and will also be returned to the Nation many times over through development of industry, agriculture, and commerce; and

Whereas it is the firm belief of this body that the advantages to be gained by the Nation from the construction of these projects, particularly in this time of National peril, far outweigh any possible adverse effect on the fishing industry or any other industry: Now therefore be it

Resolved, That the Board of Directors of the Pasco Chamber of Commerce unreservedly urge immediate appropriation of funds for the construction of Ice Harbor and the Dalles Dams; and be it further

Resolved, That a copy of this resolution be sent to each of the following: Senator Kenneth McKellar, chairman of the Senate Appropriations Committee; Representative Clarence Cannon, chairman of the House Appropriations Committee; Governor Langlie, Holland Houston, Senators Cain and Magnuson, and Representatives Holmes, Mitchell, Jackson, Mack, Horan, and Tollefson.

Adopted by the board of directors of the Pasco Chamber of Commerce, July 7, 1951.

C. S. CHURCHMAN, *President.*
CHARLES BRINKERHOFF, *Manager.*

HOUSE OF REPRESENTATIVES,
Washington, June 27, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR SENATOR MCKELLAR: Your subcommittee in considering the Civil Functions Appropriations Act for 1952 will be called upon to determine whether there should be an immediate start upon a program for additional power for the Pacific Northwest.

In the over-all defense picture for the Pacific Northwest region there has been allocated for that area in the long-range planning the necessity of an additional 1,700,000 kilowatts of electric energy over and above that which will be available from the projects already under way. This includes power to be derived from the outlying projects in the defense program.

With the tremendous importance of aluminum in the defense picture and the desire of the Office of Mobilization to expand its output of aluminum 62 percent, combined with the tremendous amount of electric energy necessary for the Hanford Engineer Works and the Atomic Commission's expansion program, the Northwest is indeed in the defense picture on a very large scale. This fact is of tremendous importance to the over-all defense picture and the problems we in the Northwest have to face.

The Ice Harbor Lock and Dam was authorized in the River and Harbor Act approved March 2, 1945. The dam is to be constructed on the lower Snake River and help to provide 9-foot slack-water navigation from the mouth of the Snake River to Lewiston, Idaho, a distance of 141 miles. The dam is to be located 9⅞ miles above the confluence of the Snake River with the Columbia River, and the back-water pool will extend up the Snake River in back of the dam a distance of 35 miles.

The estimated cost of Ice Harbor lock and dam is between $95 million and $100 million. At least, that is the latest estimate. When I first began testifying on this dam, it was $87 million plus. Of this amount, the Army engineers have spent approximately $1 million for planning. It is ready to be built. It is anticipated to put power on the line in 1955.

The anticipated plans include two 65,000-kilowatt generators in operation by December 1955 or January 1956, and two more generators of the same size by June 1956. The dam calls for the ultimate installation of five units in all of 65,000 kilowatts each.

There is included in the budget an item of $4 million to start the construction of a dam. I urged the committee to grant this budget request and get the construction of the dam underway. The committee is familiar with the benefits that would be derived from this project in providing electric energy so badly

needed in the Pacific Northwest and the defense program. The committee is likewise fully cognizant of the electric energy needed by the Hanford Engineer Works and its expansion program and the close proximity this dam is to the Hanford Engineer Works. This project is of vital importance, probably more vital now than at any time since the date of its authorization.

I am sure that your committee, in its own wisdom and judgment, will see the necessity of getting this project immediately underway. Besides the power that is so desperately needed, the benefits through transportation are of great importance to the area. The average annual commerce which the navigation facilities would permit is estimated at 2,547,000 tons.

McNary lock and dam was authorized in the Rivers and Harbors Act approved March 2, 1945. The actual construction on the project was commenced in the spring of 1947, and the project is well underway with 72,575,000 having been provided for the project up to date, the appropriation for the current fiscal year carrying an additional amount of $42,900,000.

This project is an essential unit in the power and navigation development of the Columbia River region. The $42,900,000 requested for this year's appropriation will bring the dam closer to completion. This dam, when completed, will bring the Northwest additional power of 980,000 kilowatts of energy and, in turn, will give the Northwest some additional power to help meet the unprecedented shortage that exists in that region and the demands that are being placed upon our short supply of power for the defense effort.

There is another project authorized in the 1950 Flood Control Act known as the Albeni Falls project, that has an important bearing on the power production of the Columbia River power plants. Its straight benefit will be production of power and furnishing of extra water for downstream power plants. Through storage and controlled release of the water it will make available 150,000 kilowatts at Grand Coulee and other downstream plants. It furnishes the quickest and cheapest source of power that can be developed in that area and because of the increased importance of additional power, I believe your committee should consider most carefully the advisability of expediting the Albeni Falls project.

Will you kindly bring these matters to the attention of the members of your subcommittee and include this message as my statement in your hearings on this appropriation measure.

Kind regards.

Very truly yours,

HAL HOLMES, M. C.

[Telegram]

SALEM, OREG., *July 12, 1951.*

Senator GUY CORDON,
Senate Office Building, Washington, D. C.:

Dexter reregulating dam below Lookout Point badly needed to keep uniform flow in the river to protect agricultural lands and spawning beds.

DOUGLAS MCKAY,
Governor, State of Oregon.

[Telegram]

EUGENE, OREG., *July 12, 1951.*

Hon. GUY CORDON,
Senate Office Building, Washington, D. C.:

May we urge your continuing vigorous effort toward securing appropriations for Dexter Dam on Willamette for reason of added power generation that can result from integrated development of Dexter and Meridian Dams? Also, because of the relationship of Hills Creek Dam to the Meridian and Dexter units, it should be shown that planning funds are essential also for Hills Creek Dam. With increasing defense-plant needs, with rapidly growing population in Northwest, serious power shortage is inevitable unless such appropriations are made. Call upon us for specific supporting data above requests if needed. Sincere greetings.

J. W. KIPPER,
Manager, Eugene Chamber of Commerce.

[Telegram]

SALEM, OREG., *July 12, 1951.*

Senator GUY CORDON,
Senate Office Building, Washington, D. C.:

To further emphasize my letter of July 5, it is absolutely essential to start construction on Dexter Dam immediately because if we do not do so the efficiency of the power of the Lookout Point Dam will be cut at least 50 percent as heavy rush of water at peak demand for electricity would overflow the banks below Lookout Point unless we have the Dexter regulating dam. Dexter is also necessary to protect the fishery interests because it will give a uniform flow and protect spawning beds below.

IVAN E. OAKES,
Executive Secretary, Willamette River Basin Commission.

WILLAMETTE RIVER BASIN COMMISSION,
Salem, Oreg., July 5, 1951.

Senator GUY CORDON,
Senate Office Building, Washington, D. C.

DEAR GUY: When the consideration of the civil-works appropriation for the Corps of Engineers comes up, we would like to have you consider the following:

We note they left out the Dexter reregulating dam below the Lookout Point main dam. If Dexter is not built within a very short time after Lookout Point is finished, it will be impossible to use the power at Lookout Point in the manner in which it is proposed to be used by the Bonneville Power Administration because, as you know, it would release too much water for the lower channel to carry.

We also note that they cut out the planning money for Hills Creek. Lookout Point is primarily a flood-control dam and it is necessary to use it in that manner in order to protect Springfield, Glenwood, and Eugene areas and, if it is used for a flood-control dam without the completion of the Hills Creek Dam, we will never be able to use more than one generator at Lookout Point, which is 50 percent of the installed capacity. The construction of Hills Creek could wait until Lookout Point is completed but we should be able to start construction in that same year, which would be the spring of 1954.

They reduced the bank protection to $100,000. We realize that in this emergency possibly bank-protection funds have no bearing on industrial use but they certainly do on agriculture. You have had considerable correspondence in regard to the Cox location on the South Santiam. That work alone will cost in excess of $200,000 and since the first survey was made I know of approximately 40 acres that have been washed away. If they would restore the funds that we have been getting from year to year, namely, $500,000, I think we could get by and protect some of the more critical places. I rode down the Willamette, from Corvallis to Oregon City, last week with Colonel Lipscomb, the new district engineer. I think a person realizes on a trip of that kind the excessive damage that is being done to the river banks in taking away good agricultural land. So, anything that you could do along that line will certainly be a lot of help.

We do feel very keenly that there should be some planning money set up for both Green Peter and Cougar. That the planning should be completed so that, if and when this emergency eases up, we would be able to immediately go ahead with the construction.

Sincerely,

IVAN E. OAKES,
Executive Secretary.

PEND OREILLE ELECTRIC COOPERATIVE, INC.,
Newport, Wash., July 12, 1951.

The Honorable KENNETH MCKELLAR,
Senate Office Building, Washington, D. C.

DEAR SENATOR MCKELLAR: The enclosed resolution passed by the board of directors; I believe, is self-explanatory and is intended for your information as to the feeling of the 1,115 people who receive electrical service from our cooperative.

This action was taken in view of the fact that we have been asked every winter to curtail the use of power and to discourage any heavy loads at all times, which is a definite indication of the existing power shortage and the urgent need for the development of the hydro potential in the Northwest.

We therefore urge you to give the request contained in the resolution your careful attention.

Very truly yours,

WALTER MACKAY,
Manager, Pend Oreille Electric Cooperative, Inc.

RESOLUTION 45

Be it hereby resolved by the Board of Directors of the Pend Oreille Electric Cooperative, Inc., at the regular monthly meeting this 11th day of July 1951, in their offices at Newport, Wash.:

Whereas it has come to the attention of this board that the House Appropriations Committee has made drastic cuts in requested budgets for Federal hydro development in the Pacific Northwest; and

Whereas curtailment of the hydro development will have an adverse effect upon the economy of the region:

This board does hereby strongly urge the Senate appropriations committee to restore in full all budgetary cuts made by the House.

S. D. HOISINGTON,
President.

Attest:
[SEAL]

L. C. PETERSON,
FRANK RUSHO,
OTTO KRAHN,
A. KRIZOINIS,
FRED A. WOOD,
R. J. MCKIM,
H. D. HEIBERT,
PAUL MEIERS,
Board Members.

I, L. C. Peterson, do hereby certify that I am the secretary of the Pend Oreille Electric Cooperative, Inc., and that the above resolution is a correct copy of a resolution passed by the board of directors of the Pend Oreille Electric Cooperative, Inc., at a regular meeting of said board. At the meeting seven directors were present and acted throughout, that said resolution has not been rescinded or modified.

L. C. PETERSON,
Secretary.

STATEMENT OF SENATOR HARRY P. CAIN ON EAGLE GORGE DAM, GREEN RIVER

The Green River rises in the Cascade Mountains about 60 miles southeast of Seattle at an elevation of approximately 5,000 feet. It flows north and west 60 miles to its junction with the Black River. Below the junction it is shown as the Duwamish River, which flows about 12 miles and empties into Puget Sound at Seattle.

The flood plain starts just above the city of Auburn (population 6,000) and comprises a very fertile valley 2 or 3 miles wide. Exclusive of Seattle, the basin has an area of about 474 square miles and a population of approximately 35,000. The city of Kent (population 3,000) is next to Auburn as the principal community affected by recurring floods. The flood plain is devoted to farm crops of unusually high value. There is considerable dairying in the area and the tracks of four transcontinental railroads traverse the basin.

Between November and February are the worst flood months on the Green River. The December 1933 flood inundated 13,800 acres and the December 1946 flood, 12,000 acres. The gross area subject to inundation from a flood flow of 40,000 cubic feet per second would be 19,000 acres. The area subject to flooding contains a considerable portion of urban property and facilities, agricultural land and improvements, and transportation and service facilities.

The Green-Duwamish flood-control project is a matter of no little concern to me. In fact, I introduced in the Senate on March 18, 1949, legislation to authorize construction of the Eagle Gorge Dam on the Green River to alleviate

what all of us in Washington State recognize as a situation which must be remedied.

My personal interest, however, is not as important as is the conviction among a large number of Washington State residents that the continuing flood problem of the Green-Duwamish must be rectified in the common interest.

This conviction on the part of our people out in Washington is, perhaps, best illustrated by the fact that our State legislature several months or so ago passed a bill appropriating $1,500,000 in State funds to assist in defraying the cost of the project.

On top of this State action, Mr. Chairman, King County, in which the Green-Duwamish River originates and through which it flows on its 75-mile path to Puget Sound, likewise has demonstrated its cooperative interest in accomplishing this flood-controlling project. The board of King County commissioners, following the State action, have appropriated $500,000.

I would like to make one more statement relative to these matching funds, Mr. Chairman, before I continue on with other phases of this project.

It is important, I believe, for the committee to take cognizance of the act by which the State appropriated this money. Expenditure of these funds is contingent upon "adoption and authorization of the project by Congress, and the making of a Federal appropriation therefor."

Let me say, Mr. Chairman, that there is no one in our State, of whom I know, who opposes this project. The Federal agencies concerned have all approved the project and the proposal of the engfiineers. It remains now only for Congress to appropriate the funds representing the Federal portion of the investment.

We have a large stake in this project, now and in the future.

The controlling of floods along this river is imperative in the public interest, health, and national defense. Periodic floods have caused severe damage, costing millions of dollars over the years, in the devastation of farms and small towns, loss of productivity, erosion of the soil, and destruction of highways and utilities.

With the Asiatic continent in arms against us and due to the fact that we now have an army fighting, actually carrying on warfare in Korea, the matter of shipment of the munitions of war, whether by water or air, becomes a vital question. Due to the geographical position of Puget Sound, which not only affords the only salt-water harbors served by four of the great transcontinental railroads, is actually closest to Alaska and Asia. This fact alone makes the Puget Sound area vital in the over-all picture of national defense, for the simple reason if the old axiom of "getting thar fustest with the mostest" is true, then a great part of the shipping of munitions must go out to Puget Sound and out of Seattle, the major seaport on Puget Sound.

The major part of the munitions of war will be manufactured east of the Mississippi River to be shipped to Asia in the quickest time. The munitions must necessarily be loaded on trains and carried to a seaport on the Pacific coast. The quickest turn-around will be by Puget Sound (Seattle). If anything interferes with that overland shipment, then our Armed Forces in Asia may be denied support of most vital material at a most vital time.

The United States Army has established at Auburn, King County, State of Washington, a great depot for assembling supplies of all types of our Armed Forces in the Orient. The ground on which that depot is located is reasonably high enough to protect the depot itself from floodwater. However, the approaches to the depot are subject to floods. A heavy flood—and a number have been experienced in the Green River Valley—could very well sever approaches to and from the Army depot at Auburn. Likewise the tracks used by the four great transcontinental railroads—the Great Northern, Northern Pacific, Union Pacific, and Chicago, Milwaukee, St. Paul & Pacific—are likewise in this valley, and flood conditions could seriously interfere with the movement of munitions. Likewise, main highways traverse this valley, and flood conditions can very well interfere with the trucking of supplies to the ports on Puget Sound.

This project was authorized in the Eighty-first Congress (H. R. 5472), the omnibus river and harbor bill. Bureau of Budget, under Executive order, struck out all new starts, and the construction of Eagle Gorge Dam was postponed. My earnest hope at this time is that you will find it in the interest of national security to make a modest appropriation which will permit the starting of this imperatively needed flood-control project, and by such appropriation you secure and obtain the $2,000,000 of State and county funds toward the cost of this dam.

RESOLUTION

Whereas a delay in the construction program of Albeni Falls Dam would be a severe blow to the power supply of the Pacific Northwest at a time when there is at best a power shortage; and

Whereas Albeni Falls Dam would make additional firm power available to the region faster than any other project and at a low cost at a time when additional power is severely needed in defense; and

Whereas the loss of storage from Albeni Falls in 1952–53 would reduce the power capabilities in a minimum water year by about 110,000 kilowatts and 80,000 kilowatts in an average water year, losses which the area cannot afford due to the increasing demands for power for defense and normal activities; and

Whereas the existing shortage in the region is important to the people of the Nation, and kilowatts lost by delay in the construction program means a permanent loss of income in power revenue estimated at $2,500,000 annually; and

Whereas aluminum is a vital factor in war production, and the Pacific Northwest is turning out 45 percent of the Nation's aluminum, a loss of 110,000 kilowatts of additional power for only 6 months of the year would mean a loss of 28,000 tons of the needed metal valued at about $10,000,000, which represents one-third of the total cost of the Albeni Falls project; and

Whereas, unless the appropriation eliminated by the House of Representatives Appropriation Committee is restored, there will be a construction demobilization and remobilization loss of more than one-half million dollars plus a loss of some work already accomplished under previous appropriations: Now, therefore, be it

Resolved, That the Columbia Basin Commission of the State of Washington hereby requests the United States Senate, through proper committees, to restore the $10,000,000 appropriation for the current fiscal year and seek to permit a continuation of the scheduled construction work in order that the needed power production will be available as quickly as possible and that adequate protection will be provided for the investment already made in this project.

RESOLUTION

Whereas there exists a power shortage in the Pacific Northwest, and that shortage will continue to become more acute year after year as the supply will continue to fall more and more below the demands until there are adequate power dams built on the Columbia River and its tributaries; and

Whereas continued delays in the start of new projects will stand as obstacles in the needed development of the industrial Northwest and will be serious handicaps in the long-range defense planning and production; and

Whereas the Ice Harbor and the Dalles Dam have been adjudged feasible and worthy projects and necessary to bring the Pacific Northwest power supply up to meet the needs: Now, therefore, be it

Resolved, That the Columbia Basin Commission of the State of Washington hereby urgently petitions the United States Senate, through proper committees and on the floor, to restore the $4,000,000 appropriation request for Ice Harbor Dam construction and the $18,000,000 appropriation request for construction on The Dalles Dam, items which were eliminated by the House of Representatives committee; and be it further

Resolved, That the Columbia Basin Commission of the State of Washington urgently petitions that the $3,900,000 reduction in the McNary Dam, which is already under way, be restored.

STATEMENT OF REPRESENTATIVE THOR C. TOLLEFSON, OF WASHINGTON

Mr. Chairman and members of the subcommittee, because of the unusual circumstances involved, I am taking this opportunity to bring to your attention an Army engineer project which is of vital concern to the people of my district and the State of Washington.

The project is known as the Green-Duwamish River flood-control project and involves construction of a dam at Eagle Gorge on the upper reaches of the Green River in King County, Wash. This dam, authorized by Congress in the last omnibus flood-control and river and harbor bill, is designed to control

periodic floods which, for years, have caused damage in the fertile and populous valley immediately south of the city of Seattle.

I realize fully the restrictions which have been placed on the Corps of Engineers with respect to civil functions. I know emphasis must be shifted to military matters and concur that military construction should have highest priority and attention.

However, in advancing this project for attention, the people of my district and State demonstrated their interest by allocating $2,000,000 in local funds to match the money asked of the Federal Government. One-fourth of this sum was voted by King County and the balance appropriated by the State legislature.

The State money is contingent upon the authorization and appropriation of funds for this dam by Congress. Therefore, the State money is not available to carry forward planning or construction until some Federal funds have been allocated. Unless the State money is accepted and planning of the dam is started, it will revert to the treasury of the State of Washington.

To permit this money to revert to the treasury will, of course, necessitate going through the tedious and difficult task of getting it reappropriated by an entirely new action of the legislature. This is not always easy to accomplish.

With this in mind, I feel some Federal appropriation, even in a modest amount such as $100,000, should be voted. Such action would permit the engineers to utilize the $2,000,000 now available to plan the dam and other work involved in the project. To me, this seems like good economics.

The people of my district, who are chiefly concerned, have no desire to secure this improvement at the expense of other areas also waiting on conditions which will permit civil-functions projects to proceed. We believe construction of the Eagle Gorge Dam and all other similar projects should be judged on their value to the military needs of the country and that military considerations must be paramount under existing conditions. In this connection, may I point out that in this particular flood area are important highways which would be made impassable by a recurrence of floodwaters. Near the area are located several military installations, including the Army depot at Auburn.

I sincerely trust that your Subcommittee on Appropriations for Army civil functions will give favorable consideration to this project.

MISCHKE HEREFORD RANCH,
Crofton, Nebr., April 12, 1951.

Re Gavins Point Dam.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR MCKELLAR: I am writing you to express our opposition to any further development of the Missouri River proper at this time. This includes any further appropriations for the proposed Gavins Point Dam above Yankton, S. Dak.

We appreciate that this proposed dam is listed as a war necessity. However, even though work were started at once, we understand that it would be at least 5 years before any power would be available. I understand too, that the Army engineers claim it essential to the operation of the Fort Randall project. We cannot quite understand what this relationship can be, as there is some hundred miles between the two. I have been told that this is just a "throw in" to put pressure on you and your committee.

It seems to us, the biggest taxpayers in our county, that every effort should be made to complete the projects now under construction, especially if they have any bearing on the war effort, but that no money should be spent on any new projects at this time. Let's wait and see just how much power those projects under construction will furnish and also see just how successful their operation might be. Why build more dams if those that we will have will take care of our needs.

As chairman of the committee, I ask you to be sure and have the facts and figures in regard to Gavins. Let's not spend millions just to build a lake that will probably be silted up in a few years. Let's quit spending money on unneeded projects. This tempo must stop.

Sincerely,

MARTIN J. MISCHKE.

HOUSE OF REPRESENTATIVES,
Washington, D. C., July 24, 1951.

Hon. KENNETH D. MCKELLAR,
Chairman, Subcommittee on Civil Functions Appropriations,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: Thank you for the privilege of appearing before your committee again. I come to most earnestly request that a small item of $200,000 for planning the Libby Dam be restored.

The Libby Dam, in all probability, is the most perfect example of a multipurpose, self-liquidating project in the Pacific Northwest, if not in the entire United States; and, while it is not in my district it immediately adjoins my district and is of vital importance to north Idaho, particularly the rich and productive Kootenai Valley, which is threatened every year with destructive floods.

The construction of Libby Dam will eliminate this flood danger; and save the United States Government many millions of dollars now being spent on dikes and other flood-control measures in that area.

By storing floodwaters and smoothing out the river's flow, it will develop five times as much firm power at the downstream plants, including Grand Coulee, Chief Joseph, McNary, and Bonneville, as will be developed at the Libby Dam itself. It will also furnish additional water for irrigation at the proper season, greatly aid navigation on the Columbia River, and do more than any other one project to eliminate flood hazards along the entire length of the Columbia and Kootenai Rivers from Montana to the Pacific Ocean, particularly in the States of Oregon, Washington, and Idaho.

I am advised that the United States and Canada are in practical agreement on the construction of Libby Dam and that any differences now existing will be resolved in the immediate future.

Trusting that you and your committee will give this matter your earnest consideration, I am

Sincerely yours,

JOHN T. WOOD.

UNITED STATES SENATE,
COMMITTEE ON THE JUDICIARY,
June 30, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Washington, D. C.

MY DEAR MR. CHAIRMAN: I am forwarding to you a letter which I have just received from Mr. Byron J. Rockwood, city manager of Grand Forks, N. Dak., concerning the cut made of the House committee on the civil-functions appropriation bill for the Red River Valley projects.

Needless to say, I am in accord with Mr. Rockwood's letter and certainly hope it will be possible to have these funds restored in your committee. I shall appreciate anything at all which you may be able to do on this.

With kind regards and very good wishes, I am

Sincerely,

WILLIAM LANGER.

CITY OF GRAND FORKS, N. DAK.,
June 26, 1951.

Hon. WILLIAM LANGER,
Senator, Washington, D. C.:

We have been advised that the House Appropriations Committee removed the $700,000 recommended appropriation for the Red River Valley projects. This was done after the House Civil Functions Subcommittee had recommended its inclusion.

As you know, last year's flood did much more damage than any other flood, and we had hopes that we could proceed with some of the proposed improvements in the Red River Valley in the next year or two.

We urge you to make every effort to get this money reinserted in the civil-functions appropriation bill when it gets to the Senate.

With personal regards, I am

Sincerely yours,

BYRON J. ROCKWOOD, *City Manager.*

UNITED STATES SENATE,
March 1, 1951.

HON. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
Washington, D. C.

DEAR SENATOR MCKELLAR: Herewith I am enclosing a letter containing the resolution passed by the county commissioners of Pembina County, N. Dak., relative to the clearing of the Pembina River from Walhalla to Pembina City.

It is my request that this resolution receive early consideration by your committee. I shall deeply appreciate your interest and advice in this matter.

With kindest regards, and hoping you are well and happy, I am

Sincerely,

WILLIAM LANGER.

CAVALIER, N. DAK., *February 17, 1951.*

HON. WILLIAM LANGER,
United States Senator from North Dakota,
Washington, D. C.

DEAR SIR: The board of county commissioners have requested me as county auditor to send you a draft of the resolution passed at their meeting, held February 15, 1951. Said resolution calls your attention to the urgent necessity of cleaning fallen trees and other debris that is choking the Pembina River Channel from Walhalla to Pembina City.

Text of the resolution is as follows:

"Whereas because of the blocked main channel by fallen trees and other debris in the Pembina River has in many places left the main channel and has flooded adjacent lands, causing many highways, bridges, and culverts to be destroyed, and also caused other channels to be opened by erosion rendering parts of the main channels inoperative. This condition is particularly critical from Walhalla to Pembina City.

"Whereas the board of county commissioners of the county board request that the Pembina River at least between the above-mentioned points be cleared of such debris as may cause interference with the flow in the channel. By such clearing it is the belief of the county board that the main channel will be allowed to carry away its share of normal floodwaters, therefore returning more rapidly to the water course and assisting in the control of erosion by such impeded waters opening new channels across adjacent lands: Therefore be it

"*Resolved*, That a copy of this resolution be sent to Senators William Langer and Milton Young, Representatives Usher L. Burdick and Fred G. Aandahl; J. J. Walsh, State water commissioner; Fred Fredrickson, North Dakota representative; and the Corps of Army Engineers."

Motion to adopt resolution made by Mr. Copeland, seconded by Mr. Radke.

The board urgently requests your cooperation in securing allocation of funds for the clearing and snagging of the Pembina River from Walhalla to Pembina City.

Very truly yours,

WM. J. STUBLAUGSON, *County Auditor.*

SAN JOAQUIN COUNTY CHAMBER OF COMMERCE,
Stockton, Calif., June 26, 1951.

Senator KENNETH MCKELLAR,
Chairman, Appropriations Committee,
Civil Functions, War Department, Washington, D. C

HON. MR. MCKELLAR: Your attention to the need for flood control and water conservation in central California is sought through the report depicting these needs.

We believe that the correction of this problem in San Joaquin and adjoining counties in the near future is especially important at this time to assure the continued production of essential crops. The crops produced in San Joaquin County, including fruit, vegetables, feed crops, and livestock, were valued at $127,000,000 in 1950. Flood protection and water conservation will aid in assuring the continued production of essential foods in this area.

Another reason for adequate flood protection in our area is to assure the maintenance of highways and railroads through the San Joaquin Delta area, in which

the accumulation of floodwaters converge. We feel that this will be especially necessary in a national emergency, as blocking of these roads would affect all military installations in central California.

Any assistance which you and your committee (to whom reports are being sent) can give these worthy projects will be especially valuable at the present time. Hoping the enclosed report depicting scenes of the 60,000 acres flooded here in 1950 proves of interest, I remain

Yours very sincerely,

SIMPSON HORNAGE,
Chairman, Water Conservation Committee,
San Joaquin County Chamber of Commerce.

(The report mentioned is on file with the committee.)

STATEMENT OF E. W. RISING, VICE PRESIDENT, SOUTHWESTERN IDAHO WATER CONSERVATION PROJECT, INC.

Mr. Chairman, I am appearing today for the purpose of requesting reconsideration of action taken by the House in H. R. 4386 on three flood-control items, as follows:

	Budget request	House approved
Examination and surveys	$4,900,000	0
General (emergency fund)	10,000,000	$7,000,000
Lucky Peak Dam and Reservoir	4,000,000	3,800,000

EXAMINATION AND SURVEY

The House Appropriations Committee in its report on H. R. 4386 called attention to the large number of rivers and harbors and flood-control projects already authorized and suggested that the Corps of Engineers make a revaluation of all projects still in the planning stage. Idaho people, that I represent, are in accord with the views of the committee as indicated in the suggestion mentioned, but believe that the Congress should provide planning funds for fiscal year 1952 to enable the Corps of Engineers to carry out the committee's request. It is, of course, true that our economy and project requirements change from time to time, but as to flood control it is almost certain to be on account of greater need or for added project features. This is particularly true in Idaho where our turbulent mountain streams continue to carry into the main rivers large quantities of sand and gravel each flood season, therefore, delays in construction add to both the total damages created by floods and the cost of the construction of projects necessary to protect property from damage.

GENERAL (EMERGENCY FUND)

The recent severe floods in several river basins of the United States have caused damages that were, of course, unknown when the House committee had the civil functions appropriations bill under consideration.

As one example, we have in Idaho a levee project on upper Snake River between Heise and Roberts, Idaho, on which the Corps of Engineers have recently expended perhaps $3,000,000. These levees have been built to a height and standard that will provide full flood protection to a large area when Palisades storage reservoir, located farther upstream, has been constructed.

Unfortunately, funds for the Palisades storage unit have been withheld for 2 years and in the meantime the levees have had to take the entire burden of controlling floodwaters. This year the floodwater reached the very top of the levees, leaving no freeboard, with result that the new levees have been severely damaged. Emergency repairs are necessary which will cost a considerable sum but must be undertaken during the late summer months this year, otherwise damages to the levee system may reach several hundred thousand dollars next year and in addition create damages that can hardly be estimated in the area. Therefore, the Corps of Engineers should be provided with adequate funds to take care of emergency situations such as I have described.

I therefore urge the committee to allow the full $10,000,000 request for general (emergency fund).

LUCKY PEAK DAM AND RESERVOIR

May I refer to my statement shown on pages 495–498 House hearings on civil functions appropriations bill H. R. 4386. This project has now been under construction for 2 years. The conditions along the lower 50 miles of the Boise River are similar to those described in the Heise-Roberts section of Snake River; however, in connection with Boise River floods we have to also consider damages to the city of Boise and several other cities and towns. Good progress is being made in the construction of Lucky Peak Dam, which when completed will completely control the floods affecting an area of 150,000 acres of irrigated land and give necessary protection to southern Idaho cities and towns.

We need every dollar of the $4,000,000 recommended by the Bureau of the Budget for this project for use during the next fiscal year in completing the control structure for the outlet tunnel and in relocating highways which must be moved before the storage reservoir can be placed in operation. Failure to obtain the full amount recommended will result in extending the construction period with consequent additional losses from floods and increase in construction cost of the project.

I therefore urge the committee to provide the entire $4,000,000 recommended by the Bureau of the Budget for continuing the construction of the Lucky Peak project.

Mr. Chairman, I thank you for the opportunity of presenting this statement for consideration of your committee.

UNITED STATES SENATE,
COMMITTEE ON EXPENDITURES IN THE EXECUTIVE DEPARTMENTS,
August 1, 1951.

HON. KENNETH MCKELLAR,
Chairman, Army Civil Functions Subcommittee,
Senate Appropriations Committee, Washington, D. C.

DEAR SENATOR MCKELLAR: I would appreciate it if you would add to the civil functions hearings held on July 20, 1951, the enclosed resolution voicing opposition to the closing of the locks and dams on Green River, Ky.

Sincerely yours,

THOMAS R. UNDERWOOD.

BOWLING GREEN, KY.

The Bowling Green Kiwanis Club at its meeting on Thursday, July 19, 1951, went on record as opposing the United States Government Corps of Engineers order closing locks 5 and 6 on Green River and directed the undersigned president and secretary of the Bowling Green Kiwanis Club to convey the action opposing the closing of said locks to the United States Government Corps of Engineers, Congressman John A. Whitaker, Senator Thomas R. Underwood, Senator Earl C. Clements, and Vice President Alben W. Barkley, and to request that this problem be coordinated with the flood-control and other improvement programs now being formed for Green River Valley, including the maintenance and improvement of the river channel.

The said secretary was directed to point out some of the reasons for opposing the closing of said locks as follows:

(1) Such action precludes forever the use of Green and Nolin Rivers in conjunction with scenic trips to and in the Mammoth Cave area.

(2) Cessation of maintenance of these affected pools will result in their filling up, which will mean more frequent flooding of the rich bottom lands resulting in a great economic loss to the section, and also more frequent flooding of Echo River in Mammoth Cave.

(3) This action prohibits any future plans for development of upper Green River Valley which contemplates the use of river transportation in its operation (example, are large quantities of proven asphalt deposits).

(4) The cost of keeping these locks open with minimum personnel would be insignificant and would compare favorably with cost of movement of equipment and the necessary cost of periodic inspection and maintenance.

The Bowling Green Kiwanis Club therefore urges that the order of the United States Government Corps of Engineers to eliminate locking service at locks 5 and 6, Green River, be rescinded; that the channel of Green, Barren, and Nolin Rivers

be cleaned of snags and debris; and that Green Barren Rivers be improved and maintained to accommodate Ohio River barges.

MAXEY B. HARLIN,
President, Bowling Green Kiwanis Club.
Attest: E. V. CANNON, *Secretary.*

UNITED STATES SENATE,
COMMITTEE ON RULES AND ADMINISTRATION,
July 27, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Capitol Building, Washington, D. C.

DEAR SENATOR MCKELLAR: There is enclosed herewith a letter from Mr. J. R. Hardwick, of the Tennessee Gas & Transmission Co., box 546, Catlettsburg, Ky., for your committee's information in considering the proposal of the United States engineers to close lock No. 1 on the Big Sandy River at Catlettsburg, Ky.

With kind regards, I am,

Sincerely yours,

EARLE C. CLEMENTS.

TENNESSEE GAS & TRANSMISSION CO.,
Houston 1, Tex., July 25, 1951.

DEAR SIR: We would like very much to enter a protest against the discontinuance of lock No. 1, Big Sandy River, Catlettsburg, Ky.

We are very much concerned in the amount of flow that would be present with the needles removed and we don't think we would have sufficient amount of water flow to supply our demands. We must take into consideration that we use a portion of our water for domestic purposes and we have a much better chance of extracting the impurities from a constant pool stage which we have had since this station has been in operation.

In order for this company to get their water from other sources, the cost would be tremendous and would leave us with our present water intakes useless, which cost the company several thousand dollars to make these installations. It is necessary that we operate at maximum efficiency without any interruption for the lack of water supply.

At present time our transmission lines are delivering approximately 600,000,000 cubic feet of gas per day to the most vital industries who are participating in the defense of our country.

We feel that under the present circumstances it would be impossible to make installations of other types due to material shortages which would have been available to us before this emergency defense program started.

We realize that the cost of operating lock No. 1, Big Sandy River, does not justify expenditures of several thousand dollars from a navigation standpoint, but the pool stage has been maintained for the past 10 years at the operating cost of several thousand dollars per year and we cannot understand why and what economy there would be by discontinuing operations of lock No. 1 under the present circumstances with our country preparing for a fight for survival, and considering the cost and vital materials that the Tennessee Gas & Transmission Co., Ashland Oil Refining, Carbide Chemical, United Fuel Gas Co., and the Appalachian Power Co. would have to remove from the defense material stockpiles for installations of some other source of water supply for their plants, we feel that lock No. 1, Big Sandy River, should stay in operation and be maintained by our Government for an indefinite period.

Very truly yours,

J. R. HARDWICK.

HOUSE OF REPRESENTATIVES,
Washington, D. C., July 23, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR MCKELLAR: I would like to call your attention to the proposal of the Army engineers to abandon operations at lock and dam Nos. 1, 2, and 3, Big Sandy River, at lock and dam No. 1, Tug Fork, and at lock and dam No. 1, Levisa Fork, to which the people of my congressional district are opposing.

For several years we have been trying to get the Big Sandy River canalized. I represent a coal-mining district, and we are unable to compete with other coal fields on account of water transportation, which they have and we do not have. As a result, we have a huge unemployment problem in times like these in the Big Sandy Valley.

All of these locks and dams can be repaired with very little cost to the Government, and will make the river navigable for several miles in the direction of my district. If the locks were repaired coal could be barged down the Big Sandy River. Then, again, from the standpoint of industrial development, the Big Sandy River needs the extra water that will be afforded by the repairing of these locks and dams. Inasmuch as the cost would be small, I am hopeful that your committee will see fit to make the necessary appropriations to repair these locks and to prevent their discontinuance.

I sincerely trust that this matter will receive the most careful consideration.

Sincerely yours,

CARL D. PERKINS.

LOUISVILLE, KY., *July 18, 1951.*

Honorable Chairman and Members, Senate Civil Functions Subcommittee, Senate Appropriations Committee, United States Senate, Washington, D. C.

GENTLEMEN:

LOUISVILLE FLOOD WALL APPROPRIATION REQUIREMENTS AND CONSTRUCTION SCHEDULE

Appropriation requirements

House Appropriations Committee recommendations	$3,800,000
Amount of reduction	700,000
Corps of Engineers recommendation, endorsed by the Bureau of Budget and President	4,500,000
Estimated appropriation required for completion of entire project (if $4,500,000 is appropriated this year)	6,400,000

Although, at the inception of this project, the total construction costs were estimated to be $25,700,000. The increased costs of material and labor may raise the final costs to the extent of $1,000,000. However, as the data herein will indicate, the 17.3 miles earthen levee and concrete wall being very nearly completed, total protection will be afforded when the pumping stations are constructed. Appropriation of the funds, indicated above, will provide for the installation of the 14 pumping plants needed in the operation of this flood-control project.

RIGHT-OF-WAY AND CONSTRUCTION PROGRAM

In 1937, 175,000 persons were evacuated when more than one-half of Louisville was under a flood which was the largest of record. This inundation caused direct property damage of $53,656,000 with an estimated (conservative) additional loss in income of $50,000,000. A flood in 1945 caused damage of over $1,000,000 and the municipal housing commission alone found temporary shelter for more than 200 families.

In 1938 the Flood Control Act authorized the Louisville flood-protection project and the city of Louisville obtained necessary funds for the purchase of rights-of-way through a bond issue. World War II, which delayed construction of this project, brought an industrial expansion which has continued to accelerate to the present date. Your committee has been furnished with a compilation of data as to defense plants, number of employees, and products, which data is entitled "Louisville Defense Plants."

The city of Louisville has expended approximately $1,900,000 in rights-of-way costs and the county of Jefferson, without benefit of bond issue, has expended approximately $350,000 to date. Both the city and the county are prepared to defray the costs of sewer and ditch relocations and other miscellaneous costs not covered by Federal appropriations, in connection with the construction of the flood wall.

Portions of work completed, as of this date:
Section A (pt. 1).
Section B.
Section C.
Section D.
Traffic-gate closures for sections A, B, C, and D.
Sluice gate for section A.
Gates for lower Paddys Run pumping plant.
Gates for Mill Creek pumping plant.
Work started and contracts awarded:

Item of work	Date started	Percentage completed
Section A (pt. 2)	July 1950	83
Section E	May 1950	60
Shawnee Park, 27th and 34th Sts. pumping plants	July 1950	54
5th, 10th, and 17th Sts. pumping plants	April 1951	13

CONSTRUCTION PROGRAM

As stated above, the Bureau of the Budget and the President recommended an appropriation of $4,500,000 for the fiscal year 1952 (July 1, 1951, to June 30, 1952, as computed by Corps of Engineers). According to a current statement of the United States district engineer, for the Louisville district, these funds, if appropriated in full, would be applied to the following items of work:

Completion of section A (pt. 2).
Completion of Shawnee Park, Twenty-seventh Street and Thirty-seventh Street pumping plants.
Completion of section E.
Completion of State fair grounds pumping plant.
Completion of Buchanan and Fourth Street pumping plant.
Completion of Fifth, Tenth, and Seventeenth Streets pumping plants.

Work to be initiated:

Section AA (around Belknap Hardware plant).
Beargrass Creek pumping plant.
Lower Paddy's Run, Mill Creek, and Lee's Land pumping plants.

Prior to the announcement of this schedule, Louisville and Jefferson County had obtained the assurance of the Corps of Engineers, Department of the Army (through the United States district engineer for the Louisville district) that the concrete wall, levee, and pumping plants would be completed in the western and southern portions of this project "* * * to such a point that protection would be provided, by the flood season of 1952, against a flood equivalent to that of the year 1945." Apparently the Corps of Engineers has abandoned the previous schedule by their plans for the construction of certain pumping stations in the central and eastern portions of the project, before the completion of the pumping stations in the west and southern portions. If completed, said pumping plants, in the western and southern portions of this project, would bring to fruition the earlier assurances that this community would be protected from any floods, up to an inundation equivalent to that of 1945 (the second largest flood on record for this community).

Therefore, we respectfully recommend that the schedule of construction, as previously adopted by the Corps of Engineers, be followed, that Federal funds be expended for the construction and completion of all portions of the concrete wall, levee and pumping stations, in the western and southern portions of this project, prior to the construction of the following:
Buchanan Street pumping plant
Beargrass Creek pumping plant
Section AA (protecting Belknap Hardware Co.)
and, if feasible, from engineering considerations, and to insure completion of the remaining portions:
Fourth Street pumping station

DEFENSE PLANTS, DWELLINGS OF DEFENSE WORKERS REQUIRING FLOOD PROTECTION

You will note that the flood wall is practically completed on three sides of Louisville; this project being outlined in red on the sketch attached hereto. In spite of this fact, this structure is not only useless, until the pumping stations are erected, but actually constitutes a hazard to the community. Floodwaters, of any magnitude, would not recede as rapidly and diseases, such as typhoid and typhus, might be prevalent and actually reach the epidemic stage. In addition to being disastrous to the entire community, defense plants would be rendered idle and dwellings of defense workers would be menaced. It cannot be ignored that, in addition to loss of life and property, the physical and mental strain to persons experiencing a flood, even to the proportions of the Louisville flood in 1945, and the utter despair of community rehabilitation could cause complete cessation of work in defense plants and other industries. Not only is the present inundation of the Kansas-Missouri area causing loss of life and property and rendering that vast industrial area useless, but this disaster is drawing upon the resources of the entire Nation.

Therefore, we submit this, our urgent plea; that your committee recommend that the Senate approve the full appropriation of $4,500,000 for the Louisville flood protection project, for this fiscal year and that the Coprs of Engineers, Department of the Army, be requested to plan for the expeditious completion of this project in such a manner as to provide protection, at the earliest practicable date, for floods of the proportion of the 1945 disaster and that the project be completed, in its entirety, with all haste.

Respectfully submitted.

B. J. SHAMBURGER,
County Judge, Jefferson County, Ky.
CHARLES FARNSLEY,
Mayor of Louisville.

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
February 13, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate, Washington 25, D. C.

DEAR MR. CHAIRMAN: As you will see from the enclosed copy of a letter from the Office of the Chief of Engineers, United States Army, the Flood Control Act of 1950 authorized Federal contribution of one-third of the first cost of construction of a beach erosion control project at Winthrop, Mass.

I also enclose a letter dated December 11 from the Board of Selectmen of the Town of Winthrop stating the need for this project.

It will be very much appreciated if your committee would give all possible consideration to the inclusion of necessary funds to meet the Federal contribution to this project in the fiscal year 1952 appropriations bill.

With kind personal regards,

Very sincerely yours,

HENRY CABOT LODGE, JR.,
United States Senator.

DEPARTMENT OF THE ARMY,
OFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., February 7, 1951.

Hon. HENRY CABOT LODGE, JR.,
United States Senate, Washington, D. C.

DEAR SENATOR LODGE: Please refer to our recent correspondence with you relative to a communication you had received from the Board of Selectmen of Winthrop, Mass., concerning the shore-protection project at Winthrop. A report on this matter has been received from the division engineer of our New England division and I desire to furnish you the following information.

The River and Harbor Act, approved May 17, 1950, authorized Federal contribution of one-third of the first cost of construction of a beach-erosion-control project at Winthrop Beach in accordance with the recommendations of the Chief of Engineers as contained in House Document 764, Eightieth Congress. The authorized plan of improvement consists of reconstruction of the existing sea wall from Trident Avenue to Wave Way, raising the height of the existing sea

wall 2 to 3 feet from Wave Way to Pearl Avenue and from Irwin Street to Broad Street, protection of the reconstructed wall and adjacent sections by later placement of riprap as required maintenance, construction of eight stone groins between Wave Way and Underhill Street, and placement of 200,000 cubic yards of sand fill. Federal participation is subject to the fulfillment of certain conditions of local cooperation including the adoption by the Commonwealth of Massachusetts of the authorized plan of improvement and the submission to the Chief of Engineers for approval of the detailed plans and specifications and arrangements for the improvements prior to the commencement thereof.

To date, no funds have been appropriated by Congress for the Federal contribution toward accomplishment of this work, nor does the President's budget request for fiscal year 1952 include funds for that purpose. The Commonwealth of Massachusetts acting through its agency, the metropolitan district commission, has, however, extended the reconstruction of the sea wall from Trident Avenue to Wave Way and has raised the existing sea wall between Wave Way and Pearl Avenue. It is the understanding of this office that the metropolitan district commission proposes to continue constructing the several structures comprising the authorized plan of improvement as rapidly as State funds become available and to seek reimbursement from the Federal Government for the Federal share of the cost, whenever funds are appropriated for that purpose by Congress.

It is understood that State funds are not available for continuation of the project at the present time. The next step to be taken when funds become available is the construction of the groins at the north end of the beach.

I trust that the information presented above is sufficient for your present needs. Should further particulars be desired, please do not hesitate to call upon us.

The enclosure with your letter of December 19, 1950, is returned herewith.

Sincerely yours,

W. E. POTTER.
Colonel, Corps of Engineers,
Acting Assistant Chief of Engineers for Civil Works.

TOWN OF WINTHROP, MASS., *December 11, 1950.*

Hon. HENRY CABOT LODGE, JR.,
United States Senator, United States Senate, Washington, D. C.

DEAR SENATOR LODGE: As you are doubtless aware, our town is bounded on the east by the Atlantic Ocean. That portion of the town on the westerly side of the State Boulevard which runs along the water's edge is, and for many years has been, thickly settled with permanent residences and somewhat back from the beach by commercial buildings, the total value of which doubtless exceeds a million dollars.

Every winter the storms which come in from the east and northeast drive the ocean through and around the breakwater and over the sea wall. The salt water and spray from the waves dash against the buildings, flow down the side streets, and accumulate in large quantities at the lowest spots on Shirley Street. This process, repeated year by year, causes thousands of dollars of property damage to the town and to the State. The two recent storms completely flooded the beach section of our town. It seems that neither the present breakwater nor the sea wall are sufficient to hold the elements in check. The Army engineers have made a very comprehensive study of our situation and have formulated a program to overcome the difficulties. It simply remains for someone to see that the program is carried into effect and completed. Will you not interest yourself forthwith in this matter and see that the program arranged for our relief is carried into effect and completed? To do so will earn you the gratitude of ourselves and the 20,000 inhabitants of our town.

With kindest regards and the compliments of the season, we remain,

Sincerely yours,

PETER W. PRINCI,
WALTER SMITH,
WILLIAM E. PIERCE,
Selectmen of Winthrop.

NOTE.—Like letters have been sent to our Congressmen—Senator Leverett Saltonstall, Senator Henry Cabot Lodge, Jr., Representative Thomas J. Lane.

WINTHROP BOARD OF SELECTMEN.

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
March 30, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate, Washington 25, D. C.

DEAR MR. CHAIRMAN: The enclosed letter from the Maritime Association of the Boston Chamber of Commerce, attaching a newspaper article, points out that in the interests of national security Boston Harbor should receive a greater allocation of funds for river and harbor improvements.

You will also note that it is the belief of the Maritime Association that in order to effect an increased allocation for Massachusetts it will be necessary to increase the total amount budgeted for this purpose.

It would be very much appreciated if your committee could give appropriate consideration to these recommendations.

With kind personal regards,

Very sincerely yours,

HENRY CABOT LODGE, Jr.,
United States Senator.

(The newspaper clippings referred to are on file with the committee.)

MARITIME ASSOCIATION OF THE
BOSTON CHAMBER OF COMMERCE,
Boston 10, Mass., March 28, 1951.

Hon. HENRY CABOT LODGE, Jr.,
United States Senate,
Washington, D. C.

DEAR SENATOR LODGE: Attention is invited respectfully to the attached clippings from the Boston press regarding the need of funds to adequately maintain our channels in the interests of our national security.

The year's approved budget estimate for the maintenance and improvement of existing river and harbor work for the fiscal year 1952 is understood to provide for only $400,000—Fall River—for New England projects out of a total of $220,240,000 provided for the entire United States. The New England portion is only 0.18 of 1 percent of the total. On the other hand, our population is 6 percent of the total of the United States and 6 percent approximately of the Federal taxes are paid by New Englanders. It is suggested that New England's portion of these funds is entirely out of line.

A total of $41,000,000, included in the $220,240,000, is set up for the current expenses in connection with channels and harbors. This is understood to be for the maintenance of all the channels and harbors throughout the United States. The $41,000,000 allocated is much less than in previous years and based on the inadequacy of past appropriations to accomplish the necessary maintenance work it is believed that the proposed allocation of $41,000,000 is totally inadequate. It would seem to be certain that the moneys that would be allocated to Boston, out of the $41,000,000 total, would be insufficient to accomplish the maintenance dredging that is needed to restore our channels to at least their authorized project depths.

This matter is brought respectfully to your attention for any corrective action you can take at or before the time the appropriation bills come up for your consideration.

Yours respectfully,

LEONARD B. GALLAGHER,
Colonel, USA (Retired), Manager.

UNITED STATES SENATE, *May 14, 1951.*

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate, Washington, 25, D. C.

DEAR MR. CHAIRMAN: Enclosed is a letter from Mayor Philip J. Crowley, of Everett, Mass.

Mayor Crowley's letter pertains to appropriations to carry out the provisions of Public Law 516 (81st Cong.) with respect of the deepening of the Mystic River in the Gerater Boston area.

It would be very much appreciated if your committee could give all possible consideration to the points which Mayor Crowley raises in his letter. It will

also be appreciated if Mayor Crowley's letter could be made a part of the record with respect to appropriations of this same general type.

With kind personal regards,

Very sincerely yours,

HENRY CABOT LODGE, Jr.,
United States Senator.

CITY OF EVERETT, MASS.,
OFFICE OF THE MAYOR,
May 11, 1951.

Re deepening of the Mystic River to 35 feet mean low water.

Hon. HENRY CABOT LODGE, Jr.,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR LODGE: I earnestly solicit your cooperation and wholehearted support to have moneys appropriated in order that Federal Public Law 516 of May 1950 may be started. This law authorizes the deepening of the Mystic River to a depth of 35 feet mean low water to within 100 feet of established United States bulkhead line general from upper limit of 35-foot channel of Boston Harbor at Chelsea North Bridge to the Charlestown playground and then narrowing to the downstream side of the Maden Bridge at an estimated cost of $2,587,350.

It had previously been anticipated that this project would be completed simultaneously with the construction of the new Mystic River Bridge so that full advantage could be realized, but to date no moneys have been appropriated for this project although previous surveys by the Army engineers resulted in their recommendation and Public Law 516 of May 1950 being enacted to take care of this necessity.

As mayor of the city of Everett, I am extremely anxious to have the aforementioned project completed so that Everett (which is essentially a very heavily industrialized city) could have available adequate water-front facilities which would permit the passage of seagoing ships under the new Mystic River Bridge on a 24-hour basis under all tidal conditions rather than the present conditions that restrict passage to daylight hours and selective tidal conditions.

Some of the industries located in Everett which are very essential to the national economy which would benefit by the completion of this project are as follows:

Eastern Gas & Fuel Co.
Mystic Iron Co.
Boston Consolidated Gas Co.
Boston Edison Co.
Esso Standard Oil Co.
Monsanto Chemical Co.
General Electric Co.

In addition to Everett's industries, there are a goodly number of companies located on the Boston side of the Mystic River which would benefit by the completion of this project, and these are as follows:

Boston & Maine Railroad
Wiggins Terminal Co.
United States Gypsum Co.
Pocahontas Coal Co.
Revere Sugar (United Fruit Co.)

In addition to the above, there are several steamship companies who could make better utilization of their equipment (which is very limited) under a 24-hour period rather than the present restrictive daylight hours.

It is my understanding that Federal moneys have been appropriated for the betterment of harbors and rivers throughout the country which seem far less important projects than the deepening of the Mystic River, which is a direct tributary of Boston Harbor, and I would be very appreciative of your efforts in trying to secure moneys to cover the entire appropriation. If this seems impractical at this time, at least $1,000,000 of the necessary moneys should be appropriated to make a start.

I would appreciate whatever you can do to assist in this matter.

Please accept my thanks for this and other courteous considerations you have afforded.

Yours very truly,

PHILIP J. CROWLEY, *Mayor.*

UNITED STATES SENATE,
February 1, 1951.

The Honorable KENNETH MCKELLAR,
Chairman, Senate Committee on Appropriations,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR: I have on a number of occasions directed the attention to your committee to the matter of the rehabilitation of the Keokuk Dam, at Keokuk, Iowa.

I have recently been informed that although the Army Corps of Engineers included $1,000,000 in their report to the Bureau of the Budget for the Keokuk Dam, the Bureau of the Budget saw fit to delete that item.

At this time, I would like to bring to your attention some data which I think is pertinent, and should certainly receive the fullest consideration of your committee.

Nine-foot depth for navigation on the Mississippi River between the Missouri River and Minneapolis, Minn., a distance of 660 miles, has been available since 1939, but a serious bottleneck still exists at Keokuk, Iowa, about 170 miles above St. Louis, Mo., where the existing lock, built in 1913, is entirely inadequate for needs of present-day traffic. The existing lock is 358 by 110 feet, compared to 600 by 110 feet locks at other sites, and the 1,200 by 100 feet lock being provided at Chain of Rocks and proposed for new lock No. 19.

After 35 years of service, the old lock shows the effect of age age and wear, and many of its mechanical features are nearing or have reached the end of their economic life. Major overhaul of the structure is urgently needed and should be undertaken at once if the new lock is not constructed in the immediate future. Unless such action is taken, the old lock, to a much greater extent than at present, will cause prolonged delays and interruptions to upper Mississippi River traffic. Even with complete overhaul, which could be accomplished only with intolerable interference with traffic for several years, the structure would remain an outmoded lock of short length with slow-operating characteristics, in a system of larger and faster operating locks.

Failure to rebuild the Keokuk lock would very seriously affect the security and economy of the territory adjacent to the Mississippi River, north of St. Louis. In substantiation of this statement, I quote Lt. Col. G. A. Finley, Corps of Engineers, of Rock Island:

"In answer to your request of October 26, 1950, for lock No. 19 traffic data for the 1949 navigation season, the following figures, for commercial tows only, are furnished:

	1948 [1]	1949	1950 [2]
Total tonnage	1,573,410	3,514,072	3,030,920
Average tons per tow	3,140	3,085	3,349
Total number of tows	501	1,139	905
Total number of lockages	1,007	2,195	1,810
Time spent in lockages (hours)	1,004	1,872	1,582
Time of delays to tows (hours)	537	1,000	1,000
Average lockage time, per tow (hours)	2.00	1.64	1.75
Average delay per tow (hours)	1.07	.88	1.10
Average time to transit lock 19 (hours)	3.07	2.52	2.85
Average time per lockage (hours)	1.00	.85	.87

[1] 1948 figures are for June, July, October, and November only, as those were the only months when delays records were maintained. Total tonnage for 1948 season was 3,125,156 tons.
[2] 1950 records for March through September only are included.

The tonnage figures are preliminary, but it is considered that they would be in substantial agreement with the final official figure.

In explanation of the apparently excessive average lockage time for 1948 season, it is pointed out that work on the discharge valves was carried out during the navigation season, and that the emptying time of the lock is increased about 25 percent when one of the valves is out of operation, as was the case for a considerable part of the 1948 season.

On the basis of the 1948 season figures, had the proposed new lock been in operation, the 1,139 tows could have been passed in 1,139 lockages, and delays would have been practically eliminated. Since the filling and emptying time for the new lock, including gate-operation time, will be about 10 minutes, and

if 5 minutes each is allowed for entering and leaving the lock, which will have much better approaches than the existing lock, the lockage time should be approximately 20 minutes if upstream and downstream tows alternate, and 30 minutes if all are from the same direction. For use in estimating time savings, 25 minutes is considered a fair average lockage time. Lockage of 1,139 tows would require 475 hours, a saving of 1,397 hours; these hours, taken with the 1,000 hours of delay time eliminated, make an estimated possible saving of 2 397 towboat hours. Similar figures for the 7 months of the 1950 season extended to a full season indicate possible savings of 1,549 hours in lockage time, plus 1,283 hours of delays, or a total possible saving of 2,832 hours.

The value of savings in time, estimated (perhaps too conservatively) to be $37.50 per hour for 1948 statistics, must be considerably greater by now, considering the steady increase in horsepower in new towboats and the increased construction, maintenance, and operating costs. We have no detailed information with which to revise our annual charge figures for the boat and barge fleets, but on the basis of a few figures on lay-time charges and construction costs of tows now in the petroleum trade, we consider that $60 per hour is not unreasonable. Using $60 per hour for delays in 1949 and 1950, the annual value of delays and cost per ton moved through the Keokuk lock are shown in the following tabulation:

	1948	1949	1950 [1]
Tons	3,125,156	3,514,027	3,680,398
Possible savings (hours)	2,760	2,397	2,832
Savings value	[2] $103,500	$143,820	$169,920
Value per ton	$0.033	$0.041	$0.046

[1] 7 months' figures extended to 9 months.
[2] 4 months' savings figures extended to 9 months at $37.50 an hour.

Repair, maintenance, and improvement costs for the Keokuk Lock for fiscal years 1949 and 1950 were $94,993.25 and $38,796.26, respectively. Figures for 1949 include $45,560 spent on gate repairs and $15,800 spent on discharge valve repairs.

When you realize the amount of fuel which comes up the Mississippi River north of Keokuk, Iowa, should it be cut off, we would have difficulty in supplying an area that is further removed from the source of either solid or liquid fuel, and might cause extreme hardships to industries, communities, and the farming area.

I most sincerely urge the Committee on Appropriations to give adequate reconsideration to this vitally important matter.

Sincerely yours,

HUBERT H. HUMPHREY.

ITHACA, N. Y., *July 18, 1951.*

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations, United States Senate:

The Power Authority of New York supports the Army engineers' request in 1952 budget for Niagara redevelopment remedial works investigation subject to the same understanding and rewording of purpose expressed relative to $450,000 deficiency allowance granted in third supplemental appropriation bill, 1951. This understanding and rewording of purpose is expressed on page 9 of Senate Report No. 302. The investigations involved will expedite later consideration of the Niagara project by Congress and make known the conditions of river bed, water flow, and scenic spectacle requirements that are essential to future plans for the power project. New York stands ready to finance and construct the Niagara project without cost to Federal Government, but preliminary investigation by the Army engineers should go forward in the meantime. We are not prepared to distinguish in the $2 million request between funds required for the remedial investigations and such part that may be intended solely for planning the power project.

JOHN E. BURTON,
Chairman, Power Authority of the State of New York.

UNITED STATES SENATE,
COMMITTEE ON BANKING AND CURRENCY,
July 24, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Subcommittee on Army Civil Functions,
Committee on Appropriations, United States Senate,
Washington, D. C.

MY DEAR SENATOR MCKELLAR: Mr. John E. Burton, chairman of the Power Authority of the State of New York, has been good enough to furnish me with a copy of a wire addressed to you under date of July 18, with respect to the Army engineers' request as contained in the 1952 budget for Niagara redevelopment remedial works investigation.

I have discussed this matter with Mr. Burton, and I heartily support the request as contained in his telegraphic communication to you.

You will recall that under date of July 5 Senator Lehman wrote to you in detail concerning this item of planning funds in the amount of $2,000,000, although Senator Lehman did not condition his request, as did Mr. Burton.

Sincerely yours,

IRVING M. IVES.

UNITED STATES SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
July 5, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: The United States and Canada entered into a new treaty, which became effective October 10, 1950, with respect to the uses of the waters of the Niagara River. In that agreement both countries recognize their primary obligation to preserve and enhance the scenic beauty of the Niagara Falls and River and, consistent with that obligation, their common interest in providing for the most beneficial use of the waters of that river. Among the beneficial uses are additional amounts of water apportioned to both countries for generation of hydroelectric power under certain specified limitations.

The great scenic spectacle of the Horseshoe Falls and American Falls, with a drop of about 165 feet, as well as the cascades immediately above the Falls in both countries and the gorge below the Falls, has long been a mecca for millions of tourists annually. A 1,700-foot submerged weir extending out from the Canadian shore above the Falls was completed in 1946. It was constructed to shunt water over to the American side to improve the crestline over the American Falls and also to raise the water level in the pool above by about 1 foot for increased power generation during World War II. Other remedial works indicated in a 1928 report have not yet been constructed.

Niagara River and Falls also constitute one of the greatest hydroelectric power sites in the world. Four of the Great Lakes feed the Falls with a remarkably even flow averaging 197,000 cubic feet per second. Total potential head is some 325 feet. Among the first major hydro developments on the continent are those in the Niagara area.

Before the negotiations that led to the present treaty Canada was diverting 49,500 cubic feet per second for power generation as compared to 32,500 on the American side. Under the present treaty the power diversions by the two countries are equalized. During the average water year each country is entitled to use some 65,000 cubic feet per second for power development. Thus, it is seen that the United States is entitled to twice its present power flow and can utilize that water through a maximum head of some 325 feet. The increased output on the United States side will aggregate about 7.8 billion kilowatt-hours annually.

Article II of the treaty sets up a procedure for investigating and determining the nature and design of remedial works necessary to enhance the beauty of the Falls by distributing the waters so as to produce an unbroken crestline on the Falls. These detailed surveys and studies are now underway under the general supervision of the International Joint Commission. The Corps of Engineers and the Federal Power Commission are performing the engineering work for the Commission. Funds are being requested by the State Department to finance

those remedial-works surveys during fiscal years 1951 and 1952. Under the new treaty the water which may be withdrawn for power development varies during the seasons of the years and hours of the day. This complicates engineering planning for the works to maintain and enhance the scenic spectacle as well as to develop additional power.

The necessary engineering planning to maintain an unbroken crestline on the Falls is inextricably associated with the amount of water withdrawn for power-generating purposes, the coordinating of the withdrawals of the two countries, the location of the power-water intakes, and associated questions, including the effects of these new hydraulic conditions upon the existing Federal navigation projects in the Niagara Falls-Buffalo area. The treaty defines water for domestic, sanitary, and navigation purposes to be of first priority.

In this connection a resolution passed by the Senate Committee on Public Works on June 5, 1951, requests the Corps of Engineers to review previous reports on Niagara River, Black Rock Channel and Tonawanda Harbor, and Buffalo Harbor, all of New York, with a view to determining the most feasible general plans for utilization of the water apportioned to the United States for power development at this locality consistent with the provisions of the present treaty, and the effect of such developments upon the Federal navigation projects at this locality.

Funds in the amount of $2,000,000 for Niagara power-development studies by the Corps of Engineers were included in the President's Budget for 1942. However, the civil-functions appropriation bill for fiscal 1952, as passed by the House of Representatives, omitted funds for that purpose.

In order that all the complex hydraulic questions and other allied engineering questions may be properly studied and coordinated, engineering and cost surveys with respect to the United States power redevelopment must go forward now, in step with the planning of remedial works. It is impossible to separate the two phases of the studies.

There is an acute and serious shortage of electric energy in the Niagara area on both sides of the border. This increased power is urgently needed in the Buffalo area to meet present loads including those in connection with the defense mobilization effort which cannot now be met. The prospective power development at Niagara Falls will increase the total dependable generating capacity of plants on the United States side from an existing 440,000 kilowatts to 1,392,000 kilowatts, an increase of 952,000 kilowatts providing about 7.8 billion kilowatt-hours of additional energy output. This capacity can be readily observed within 5 years which is less than the time required for its construction. Generation cost is very low, being presently estimated at about 1.8 mills per kilowatt-hour. Thus Niagara hydropower is decidedly low cost. It is in a region of high-cost fuel-generated power.

The Hydroelectric Power Commission of Ontario has already started construction of additional hydroelectric generating facilities on the Canadian side to utilize the full amount of water apportioned under the treaty to meet the grave power shortage in that Province. Ontario Hydro also has several other plants under construction. Thus, Canadian authorities are showing greater initiative than we are.

On January 17, 1951, I introduced a bill, S. 517, which, among other things, would authorize construction of works for the modernization and redevelopment of hydroelectric generating facilities at Niagara on the United States side. This redevelopment is estimated on present plans to cost from $308,000,000 to $350,000,000 on January 1949 levels, depending on the type of construction finally adopted. However, the extremely low generation cost of some 1.8 mills for a huge new block of some added 7.8 billion kilowatt-hours annually in a high-cost power-short area is a shining example of wise water resource development that should not be ignored. Whatever disposition Congress makes of this power potential, the engineering study will be needed.

It is essential that the engineering studies to determine the most feasible general plans for power development on the United States side should go forward now, simultaneously with the investigation into the necessary remedial works referred to above, in order to implement the treaty and at the same time have in readiness sound up-to-date blueprints for a great power project. Accordingly, I strongly urge that your committee consider favorably the restoration of planning funds in the amount of $2,000,000 for this item.

Very sincerely yours,

HERBERT H. LEHMAN.

UNITED STATES SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
July 20, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: On July 5 I wrote you concerning a proposed item in the civil functions bill of $2,000,000 for a survey of water-power development on the Niagara River.

In that letter I used some figures which were supplied to me by the Corps of Engineers but which do not conform exactly to the standard figures worked out by the Bureau of Power of the Federal Power Commission and which I have used in the past. I have checked with the Corps of Engineers and they agree that the figures worked out by the Bureau of Power of the Federal Power Commission are probably more accurate, pending the detailed engineering study which is being proposed.

On page 3 of my letter, in the second paragraph, the third sentence, should read: "The prospective power development at Niagara Falls will increase the total dependable generating capacity of plants on the United States side from an existing 440 000 kilowatts to 1,572,000 kilowatts, an increase of more than 1,130,000 kilowatts, providing about 7.9 billion killowatt-hours of additional energy output."

I write you this letter in order that my original letter, if you see fit to put it into the record, will have figures conforming with those I have used in the past and which are still considered standard.

I certainly appreciated the opportunity given me to appear before your committee to present briefly my advocacy of the Niagara item. I understand that the committee did not have an opportunity to hear Colonel Potter on this matter and that since then Colonel Potter has gone on leave. I am advised by the Corps of Engineers that Gen. C. H. Chorpening will be handling this matter for the Corps of Engineers and is prepared to supply the detailed information which I had hoped Colonel Potter would furnish you. I would be very happy if, when you do hear General Chorpening, you would inform me so that I might take further advantage of your committee's hospitality by being present on that occasion.

Very sincerely yours,

HERBERT H. LEHMAN.

WASHINGTON, D. C., *July 16, 1951.*

Hon. KENNETH MCKELLAR,
Chairman, Subcommittee on Civil Functions,
Senate Appropriations Committee, the Capitol, Washington, D. C.

DEAR SENATOR MCKELLAR: I understand that the Senate Appropriations Committee is presently considering the civil functions appropriations bill. I am writing to you, chairman of the subcommittee which is studying this important measure, to express my interest in and support for the Schuylkill River appropriation.

You are undoubtedly familiar with the fact that the House reduced the budget amount of $1,900,000 to $1,000,000. I sincerely urge you to lend your support to restoring the original amount in view of the importance of this project in critical defense areas in Pennsylvania, and in view of the fact that the Corps of Engineers recommended the $1,900,000 figure as the minimum economic amount advisable.

For your further information I am enclosing herewith a copy of the statement I made before the House some weeks back.

Sincerely yours,

FRANCIS J. MYERS.

STATEMENT OF FRANCIS J. MYERS, FORMER UNITED STATES SENATOR OF PENNSYLVANIA

My name is Francis J. Myers, former Senator of Pennsylvania. I represent the Skuylkill Valley Restoration Association, which is composed of public-spirited individuals, civic organizations, and certain municipalities bordering the Skuykill from and including Philadelphia to Reading, Pa.

WHAT THE PROJECT IS

The Skuylkill project is a joint enterprise of the Commonwealth of Pennsylvania and the Federal Government for dredging out the accumulated coal silt deposits from the bed of the Skuylkill River. This river is the source of water supply of six municipalities, including Philadelphia, which draws half of its water supply therefrom. In this project the State agreed—

(1) To stop the collieries in the upper reaches of the river from discharging their coal silt into the river. This has been done. All 47 collieries are now equipped with settling basins and treatment works and now discharge only clear water into the river or its tributaries.

(2) The State agreed to dredge out an estimated 24,000,000 tons of deposits in the river above Norristown. To do this $35,000,000 was actually appropriated, and under it the State has completed about 90 percent of its share of the work.

(3) The Federal Government agreed to dredge the river from Norristown to Fairmount Dam, Philadelphia. It was agreed that when the Commonwealth's work had proceeded to the extent of completing 50 percent or one-half of its share of the work the Federal Government was to commence its part of the work and to remove an estimated 12,000,000 tons in the part of the river it had agreed to clear.

AUTHORIZATION OF FEDERAL SHARE OF WORK

The River and Harbor Act approved July 24, 1946, adopted a project providing for the improvement of the Schuylkill River above Fairmount Dam in the interest of navigation and other purposes, by the removal of culm deposits from the pools formed by Plymouth, Flat Rock, and Fairmount Dams. The current estimated cost of Federal participation in this work is $12,574,000. This, as before stated, is a cooperative project, local interests being required to remove all culm deposits above Norristown, Pa., which is the upper limit of the project where work is to be performed by the Federal Government, and to take the necessary action to prevent the discharge of mine and industrial wastes into the streams of the Schuylkill River watershed. Funds in the amount of $400,000 were provided in the 1950 Appropriation Act for initiation of work on the Federal part of the project and are being applied to the construction of disposal areas for the retention of dredged spoil.

The approved budget estimate for 1951 for rivers and harbors included $4,000,000 for continuation of work on this project. As passed by the House of Representatives, the 1951 appropriation act included $2,500,000 for continuation of work, while the act as passed by the Senate included $3,500,000 for the project. The general appropriation provided for a reduction of over $75,000,000 in the amount recommended by the Senate for civil works program. It also called for an over-all reduction in Government expenditures for nondefense purposes of $550,000,000 a portion of which has been applied to our civil works program.

The amount allocated to this Schuylkill project was one of the items cut out and not expended in the 1950–51 fiscal year.

BUDGET RECOMMENDATIONS FOR FISCAL YEAR BEGINNING JULY 1, 1951

The sum of $1,900,000 has been recommended in the President's budget message, after first having been cleared by the Corps of Engineers, being the minimum economic amount advisable.

It is respectfully submitted and urged that at least the item as recommended by the budget be appropriated and made available for the following reasons:

1. Obligation of the Government

The Government should honor its agreement which led the Commonwealth in good faith to do its share of the work. Two and a half million people of the Schuylkill Valley feel their Government has broken faith in not keeping to its promise. They feel this project is in a different class from those in which the Government is asked to pay the entire cost or which have not yet been begun.

2. The project's relation to war effort

The project has a direct relation to the war or defense effort for the following reasons:

(*a*) *The project provides industrial or municipal water supply in critcal areas.*—There are six large municipalities (including Philadelphia), with a population of

2,103,000, that use the Schuylkill River as a drinking water supply source. For this purpose they use 218,000,000 gallons daily. In addition, many essential industries with large employment use the river water directly for industrial purposes. Some of the larger and better known of these are: Bethlehem Steel Corp., No. 3 blast furnace of the United States Navy Steel Foundry, Phoenix Iron & Steel Co., Birdsboro Steel Foundry & Machine Co., Carpenters Steel, Alan Wood Steel Co., Continental Diamond Fibre Co., James Lees Woolen Mills, Swedeland Blast Furnaces, Valley Forge Cement Co., Philadelphia Electric Co., Metropolitan Edison Co., Hamilton Paper Co., Atlantic Refining Co., Gulf Oil Corp., Du Pont Co., United States Gypsum Co., Container Corp., Philadelphia Gas Works; and the Barrett Division of the Allied Chemical Co.

(*b*) *The project is an important harbor or waterway.*—The presence alone of the Philadelphia Naval Base and the Nation's second oil-refining and shipping center along the river attest to its importance in this category—not to mention the other major industries using the lower Schuylkill for shipping. The completion of the Federal dredging will materially reduce maintenance costs and operations necessary to maintain the essential shipping channels in both the Schuylkill and Delaware Rivers.

(*c*) *The project includes the development of power.*—This yardstick is inapplicable to this older region of the Nation whose power resources were developed prior to Federal-aid programs in this field. Existing power sources, however, will be enhanced by the project since the construction of at least two new power plants in the valley is awaiting completion of the river clean-up.

(*d*) *The project protects important industries of major food-producing areas.*—The project will lower the flood plane 4 to 8 feet and will continue to lower it thenceforth. The United States Engineer Report of 1936, interpreted into 1950 dollars, estimates annual avoidable flood damages in the valley at over a million dollars. The answer to criteria (a) also gives some idea of the nature of the industrial area that will be protected.

(*e*) *The project is a dam and reservoir project where closure is under way or has been effected and should be completed to a point of useful operation.*—This project involves three dams. Two of them are now closed and the other is scheduled to be closed in November 1950.

(*f*) *The project involves almost entirely the movement of earth such as channel improvements or levees and does not compete in the use of critical materials.*—This Federal project consists entirely of the movement of silt. No critical materials will be used. No essential manpower is involved in the operation of dredges since such labor is traditionally made up of unskilled, over-military-age personnel.

UNDREDGED DEPOSITS A CONTINUAL MENACE TO THE NAVIGABLE REGIONS OF THE SCHUYLKILL

Recurrently the accumulated coal silt now in the area which the Government agreed to dredge is carried by floods over the crest of the Fairmount Dam and chokes the channel of the navigable portion of the Schuylkill, interfering with the access to the important industries located there. These industries have a direct relation to the defense or war effort. Among these industries are Philadelphia Electric Co., Westinghouse, and the oil refineries.

On Saturday, November 25, 1950, by reason of the torrential rainstorm one of the worst floods in the history of the Schuylkill occurred. It swept over Fairmount Dam substantially more than 1 million tons of silt into the navigable portions of the Schuylkill. The Government had to immediately place in operation its dredge *Harding* below Passyunk Avenue, and to provide three more contract dredges in the emergency in order to give access to the Gulf Oil Refinery, to the Philadelphia Electric works and one in the back channel of the United States navy yard. In contrast to what happened in the area between Norristown and Philadelphia, in the region above Norristown to Reading and beyond where the State had removed more than half of the silt deposits, there was no flood damage even though the flood had reached a stage comparable with that of 1942 which then inundated a considerable portion of the city of Reading.

The navigable portion of the Schuylkill with its important industries will be continually subjected to this hazard until the Federal Government proceeds with its promised share of the project.

MUSCATINE, IOWA, *July 30, 1951.*

SENATE APPROPRIATIONS COMMITTEE,
Senate Office Building, Washington, D. C.

Gentlemen: We wish to urge very careful consideration by you of the Drury drainage district, Rock Island County, Ill., and pool No. 16 problem as presented in the interim report of the United States engineer office for the upper Mississippi River.

We feel that improvements and remedial works are necessary for the reasons enumerated below:

1. That the so-called 9-foot channel project has never been finished as our levee is still being used as a part of the structure of lock and dam No. 16 and has not been raised and strengthened so as to be adequate.

2. Value of the 9-foot channel was proven during World War II as tank fleets and tank farms were the means of supplying fuel for the mechanized farms of the upper Mississippi Valley when no other means was available and hence is a national defense necessity.

A new channel could very easily develop around dam No. 16 if a major flood was encountered and the Drury levee was not adquate this would probably render lock No. 16 inoperative.

3. That it is in the public interest that the several thousand acres of very fertile land in Drury drainage district be kept in cultivation and that this cannot be done under the hazard now existing.

4. That a section of the transcontinental highway passing through Drury drainage district and was out of use for 8 weeks and is in constant jeopardy.

5. That a probable loss of considerable tax money is also a possibility if adequate means of protection are not provided.

LEE I. OSBORNE,
Acting District Engineer, Drury Drainage District.
J. R. HUNTER,
Commissioner Drury Drainage District, Rock Island County, Ill.

CHESTER, ILL., *June 18, 1951.*

Re levee to protect Prairie du Rocher and Modoc, Randolph County, Ill.

Hon. PAUL H. DOUGLAS,
United States Senator, Washington, D. C.

DEAR SENATOR: I know that you do not approve of wasting Federal funds on river projects but that you preach economy in Federal Government. However, I do not believe that you advocate percentage cuts, but only to avoid waste. If I am correct about your belief in Government economy, I trust that you will read the balance of my letter.

The area that is now within the Prairie du Rocher and Modoc levee and drainage district was, prior to 1945, the only major area along the Mississippi River between East St. Louis and Cairo, for which there was no levee protection either authorized or constructed. This area included the villages of Prairie du Rocher and Modoc and about 16,000 acres of farm lands; about 12 miles of the main line of the Illinois division of the Missouri Pacific Railroad, and about 5 miles of the main line of the Missouri-Illinois Railroad. Practically all of this area was flooded in 1943, 1944, and 1947, with serious damage to farm lands, buildings, and railroad right-of-way. Large parts of it were flooded also in 1942 and 1945.

At the present time the levee system is about three-fourths complete and there is gap at the upper end of the village of Prairie du Rocher (population 600) and a 3½-mile gap at the lower end at the mouth of the Kaskaskia River. We would like to see an appropriation so that work can continue so that this project may be completed.

It doesn't seem reasonable that a project which is about three-fourths complete should be left with a gap at both ends. One destructive flood like we had in either 1943 or 1944 would cost the people of this area and the United States Government more than it would cost to complete this project. During the war years the Illinois division of the Missouri Pacific averaged a train every 20 minutes or 72 trains a day, moving oil, coal, troops, etc. Both in 1943 and 1944 this line was washed out so no trains ran for about 10 days or 2 weeks. Then for a month after the floods the trains moved on slow orders while work trains and section crews repaired the tracks.

The Missouri-Illinois is a short-line railroad from the Lead Belt in Missouri to the coal fields in Illinois and interchanges with the Missouri Pacific within our levee district. The right-of-way of the M.-I. was washed out in 1942, 1943, 1944, 1945, and 1947. It would seem to me to be penny-wise and pound-foolish to unnecessarily delay the completion of this levee project when so little effort will do so much good.

Respectfully yours,

WM. E. BERRY.

ST. LOUIS, MO., *June 22, 1951.*

Hon. PAUL H. DOUGLAS,
Senator, State of Illinois, Congress of the United States,
Senate Office Building, Washington, D. C.

DEAR SENATOR DOUGLAS: It is my understanding that the civil-functions bill will shortly be before the Civil Functions Subcommittee of the Senate Appropriations Committee for consideration. This reminds me that I wrote you May 9 about the bad effect on national defense of stopping the levee work between East St. Louis and Thebes, Ill.

You probably know that there has been an agreement between the State of Illinois and the United States Government with the railroads spending some $2 million to control this section of the river and that over $20 million has already been expended for this purpose. One million eight hundred thousand dollars was asked for by the Corps of Engineers to continue the work on four of these levees, in the interests of national defense and economy. The most critical one of these appropriations asked for is $500,000 for the Prairie du Rocher and Modoc levee district for the coming year's needed work. Without this, not only will there be quite a bit of waste in picking up this situation a year from now, but also flood stages of the Mississippi River will probably shut down Diesel-engine transportation over this section for periods of times as set out in the statement sent you some time ago. You are probably acquainted with the fact that whereas a steam locomotive can operate through water close to the firebox, a distance of say 24 inches above the rails, Diesel engines cannot operate where the water is more than 4 inches above the rail.

While this matter was discussed in the hearings before the Civil Functions Subcommittee of the House Appropriations Committee, this, like all other appropriations not hitherto approved by the Director of the Budget Mr. Lawton, were left out of the House bill. Since this is of importance to the national defense as well as to the State of Illinois and since there is an agreement between the Sate of Illinois, the United States Government, and the railroads for this national defense protection, I shall very much appreciate your reading my letter of May 9, 1951, with the accompanying statement as to why this reasonable appropriation should be made for the coming fiscal year. It will also be appreciated if you will tell me to whom I should direct a written statement for consideration by the Senate Civil Functions Subcommittee of the Appropriations Committee in this regard.

Yours sincerely,

ROBERT B. BROOKS.

CINCINNATI CHAMBER OF COMMERCE

Whereas lock and dam No. 37 on the Ohio River at Fernbank, Cincinnati, Ohio, was completed in 1911 and has been in constant service since that time; and

Whereas it has nearly reached its normal period of usefulness and now has high maintenance costs and badly deteriorated sills; and

Whereas the failure of this structure would cause a most serious calamity to Cincinnati and to nearly all navigations on the Ohio River, which now amounts to more than 40,000,000 tons annually; and

Whereas the pool formed by dam No. 37 provides practically the entire water supply for a population of nearly a million people in the Cincinnati area which would be seriously affected by failure of the dam; and

Whereas complete engineering studies, including detailed construction drawings and specification, require a period of 3 years and an expenditure of about $600,000 for completion; and

Whereas only $70,000 has been allotted for this purpose to date and a movement has been initiated to reduce the Bureau of the Budget estimate for fiscal year 1952 from $100,000 to $50,000; and

Whereas the condition of this structure is so critical and its importance to the Cincinnati area and the Ohio Valley is so great that such minor economy is unjustified: Therefore be it

Resolved, That the Congress of the United States and all interested Government agencies should appropriate and allot a minimum sum of $150,000 for fiscal year 1952 and a sum of $380,000 for fiscal year 1953 for the complete engineering design, with construction drawing and specification for lock and dam No. 37 on the Ohio River, since these amounts provide for the logical and economical progress of this important structure and no more than reasonable assurance that a new structure may be completed before the failure of the present one.

Adopted by the board of directors, Cincinnati Chamber of Commerce, January 23, 1951.

DOUGLAS K. FULLER,
Executive Vice President.

UNITED STATES SENATE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
July 27, 1951.

HON. KENNETH MCKELLAR,
United States Senate, Washington, D. C.

DEAR SENATOR MCKELLAR: May I ask your particular consideration looking toward the restoration of a recommended appropriation of $25,000 submitted by the Bureau of the Budget for planning for Bladensburg (Md.) flood control, which was eliminated by the House along with many other planning items.

Certainly nothing could be more vital to the country in time of possible emergency than free access to and egress from the Nation's Capital. Experience of many years has shown, however, that such access to and egress from the Capital through Bladensburg, which is on the main route from the North, are totally disrupted whenever there is a storm of any proportion.

Under the circumstances, I feel it urgent that the planning item of $25,000 for correction of this situation be restored to the budget so that preparations may be made to correct this condition at the earliest possible moment.

I would be happy to appear before the committee if it was deemed necessary but I believe the experience of recent years with regard to continual flooding at this point speaks for itself.

With kindest regards,

Sincerely yours,

HERBERT R. O'CONOR.

HOUSE OF REPRESENTATIVES,
Washington, D. C., July 25, 1951.

HON. KENNETH MCKELLAR,
United States Senate, Washington, D. C.
Chairman, Senate Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR MCKELLAR: I did not arrive in Washington in time this morning to attend the hearing before your committee when the Cleveland delegation appeared, presenting facts in connection with the Cleveland Harbor situation.

From a national defense standpoint, I do not know of any project that is more worthy because if the five bridges that are involved in the program are completed in 1952 it will enable the steel companies located on the Cuyahoga River to secure an uninterrupted supply of raw materials in connection with their tremendous plant-expansion program which is to be finished in 1952 at a cost of $130,000,000. Only $13,200,000 is involved in the Federal Government's share in completing this project, and the city of Cleveland, the railroads, and the industries located along the river are ready to spend some $13,600,000 to match the Government appropriation. In addition to this amount, the steel companies will spend $130,000,000.

This is an important national defense project, and I hope that your committee will give it serious consideration.

Sincerely yours,

GEORGE H. BENDER.

HOUSE OF REPRESENTATIVES,
Washington, D. C., June 27, 1951.

Re: Port of Houston.

Hon. KENNETH MCKELLAR,
Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR: You will find enclosed a tabulation of the 10 major ports in the United States showing their 1949 tonnage (the 1950 figures are not available), the budget estimates for 1952, and the amounts allowed by the House Appropriations Committee. These figures were furnished me by the Corps of Engineers.

Unquestionably, some retrenchment is necessary in all appropriations. These figures apply to improvement work for the various ports. You will note that the port of Houston had a budget estimate of $1,500,000 for improvement. The House Appropriations Committee allowed only one-third of that amount. The other ports were allowed approximately the full budget estimate.

What I am saying is simply this: All the port of Houston wants is to be fed out of the same spoon that the others are. In other words, if the majority of the ports are given the full budget estimate for improvements, so should the port of Houston.

I hope you will review this matter and apply your usual good judgment to it.

Thanking you, and with kind regards and best wishes, I am

Sincerely yours,

ALBERT THOMAS.

Port	Tonnage, 1949	Budget	Given by House
1. New York (includes New York and New Jersey)	127,952,821	$2,796,000	$2,754,000
2. Sabine-Neches waterway	51,000,000	465,000	465,000
3. Philadelphia Harbor	40,000,000	None	None
4. Houston	37,000,000	1,500,000	500,000
5. Baltimore	35,000,000	800,000	800,000
6. New Orleans	30,000,000	None	None
7. Norfolk Harbor	21,000,000	None	None
8. Los Angeles and Long Beach	21,000,000	None	None
9. Boston	16,000,000	None	None
10. Lake Charles, La	13,000,000	1,025,000	775,000

A STATEMENT SUBMITTED BY HARRIS COUNTY FLOOD CONTROL DISTRICT, A GOVERNMENTAL AGENCY OF THE STATE OF TEXAS

I. THE AREA AND THE PROBLEM

The Harris County flood-control district covers an area of 1,747 square miles. It had a 1950 population of 806,701, increasing at a phenomenal rate. The city of Houston is located in its approximate center.

It is the hub and center of the Gulf-coast industrial area, and of the oil, natural gas, and chemical industries, all related directly to, and forming an essential part of, vital defense projects.

Repetition of this area's flood of 1935 would be the equivalent of an atomic bomb dropped on the city of Houston in terms of the disruption and loss of production in the locality. Many of the new industries, particularly chemicals and oil, have been established since 1935.

The project in support of which this statement is submitted involves a higher percentage of local and State participation than any with which the undersigned are familiar. The citizens of Harris County and the city of Houston, included within the area of the flood-control district, are prepared to assume this high percentage of local responsibility for carrying through this protective project. Historically, control of floods has been a function in which the Federal Government has properly recognized and assumed a major responsibility. Here, however, the citizens of the State and the locality have contributed far beyond the normal local contributions.

The watershed of the district is composed almost entirely of the rivers known as Buffalo Bayou and its tributaries, Brays, Sims, and White Oak Bayous, the word "bayou" being the local name for "river." The lower 15 miles of Buffalo Bayou form the port of Houston and include the important Houston ship channel. Buffalo and White Oak Bayous join in the center of the city of Houston. Brays

and Sims join Buffalo just below the city. The $100,000,000 medical center has just been established along Brays Bayou in the city of Houston.

Industries along the banks of the ship channel on the lower reaches of the Bayou represent an investment of more than $1,100,000,000. These are comprised almost wholly of vital defense industries in the form of oil refineries and chemical industries. In addition to a number of other refineries, it includes one of the largest in the world at Baytown.

In addition, there are a large number of defense and other industries on the light-draft section of Buffalo Bayou and its tributaries, upstream from the turning basin of the port. Industries engaged in the manufacture of airplane parts, guns, gun barrels, trucks, tanks, and other vital war production are included, as well as oil and chemicals. Over 35 million tons of petroleum and petroleum products are handled by the port annually.

The entire area, though small when compared to some other river systems, is subjected to unusual heavy torrential rainfall conditions accompanying Gulf cyclonic disturbances. It has been visited by the most severe storms ever recorded in the United States. Among these may be mentioned the floods of 1929 and 1935, which caused damage to the city and the port of Houston of $1,400,000 and $2,600,000, respectively. In the 1935 storm, within the city limits of that date, the inundations covered an estimated 2,400 acres, including 25 blocks in the main business area and 100 blocks in highly developed residential areas.

Since 1935 the city of Houston and Harris County have experienced phenomenal growth. Both industrial and residential developments have had a tendency to follow rivers and streams as natural carriers of commerce and intercourse. Through the construction of streets, storm sewers, and other drainage facilities which accompanied this development, hydraulic conditions have been created which increase the adverse characteristics of flooding. The standard of a design storm based upon statistics and engineering data for streams in this region far exceeds the 1935 storm; but if the 1935 storm should recur under present conditions the direct damages along Buffalo Bayou and its principal tributaries named would exceed $50,000,000, and the indirect damages would be more than $20,000,000, a total of over $70,000,000, as compared to approximately $3,000,000 in 1935. Based upon present industrial and domestic development and using the type of storm which is necessary as a basis for adequate flood-control design, with the stream channels in their present condition, engineers estimate the direct and indirect property damages would probably exceed $200 million.

A small storm occurred on Brays Bayou in October 1949. It caused direct damages of more than $5,000,000. Development and growth of this area has nevertheless tremendously increased. A similar comparatively small storm can be anticipated to occur on an average frequency of about every 5 years. Such a limited storm would now result in average annual damages of more than $2,000,000. This damage will be increased in future storms because of new construction and development.

Engineering analyses and economic surveys in 1950 show annual direct damages due to floods in Houston and Harris County on Buffalo, Brays, Sims, and White Oak Bayous of approximately $4,000,000, a total annual loss of about $18,000,000.

Inadequate flood-control measures caused the 1935 storm to deposit unusual quantities of silt and soil in and along the waterways, materially increasing the maintenance cost. Proper protection against recurrence is essential to avoid heavy maintenance charges.

The port of Houston was the second deep-sea port of the Nation in 1948 and 1949, based on official commercial statistics reported by the Army Chief of Engineers. 1950 figures have not yet been issued, but the port's own statistics show an increase of more than 5,000,000 tons in 1950 and 1951 tonnage running more than 13 percent higher than 1950.

Recurrence of disastrous floods interferes materially with the transport of defense cargoes to and from numerous industries along the ship channel, and disrupts the flow of supplies and stocks from one industry to another.

Engineering estimates of the cost of flood-control measures essential to eliminate all danger from floods on these streams shows an estimated cost of approximately $70,000,000. About $11,000,000 has been spent to date. About $60,000,000 is required to complete necessary flood-control measures. Such a project would pay for itself every 4 or 5 years, and is thoroughly justified economically.

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II. PAST PROTECTIVE MEASURES

Following the 1935 storm, the Committee on Commerce of the United States Senate adopted a resolution February 20, 1936, requesting the Board of Engineers of Rivers and Harbors to review the reports on the Houston ship channel with a view to improvement of the channel and its protection from the deposit of silt, etc. In accordance with this resolution and under authority of the Flood Control Act approved June 22, 1936, the Secretary of War submitted a report to the Congress on December 11, 1937, recommending the treatment of the flood problem as now covered by the existing Federal project.

The existing flood-control project (H. Doc. 456, 75th Cong., 2d sess., and the definite project report of July 1940 by the Corps of Engineers) considered the improvement of Buffalo Bayou and tributaries above the turning basin of the port of Houston and excluded any specific consideration of flood conditions on Brays and Sims Bayous below the turning basin. The various features of the existing project are as follows:

(*a*) Barker Dam and Reservoir.
(*b*) Addicks Dam and Reservoir.
(*c*) Channel improvement below Barker and Addicks Dams.
(*d*) White Oak Dam and Reservoir.
(*e*) North Canal, diversion from White Oak Reservoir.
(*f*) Brickhouse gully bypass channel.
(*g*) South Canal, diversion from rectified channel below Barker and Addicks Dams.
(*h*) Removal of obstructions in city of Houston.

Barker and Addicks Dams and Reservoirs have been completed with required rectification of the channel of Buffalo Bayou below the dams. Local interests contributed directly $2,900,000 of the approximate cost of $11,000,000, and indirectly contributed and are contributing approximately $15,000,000 for drainage as related to flood ontrol. Nevertheless discharges from uncontrolled watersheds below these dams, plus discharges from the resorvoirs formed by the dams, can and will cause serious damaging flood conditions on Buffalo Bayou in the city of Houston, in the turning basin and in the ship channel. The existing project excluded any consideration of alleviation of damages along Brays and Sims Bayous. Since the project was initiated, these areas have become of great importance due to rapid growth and development.

Local interests requested the Corps of Engineers to review project recommendations and determine whether the existing project remained adequate for treatment of the flood-control problem. As a result, by resolution of the Committee on Flood Control of the House of Representatives adopted July 16, 1945, and resolution of the Committee on Public Works of the House of Representatives, adopted April 20, 1948, the Corps of Engineers was authorized to restudy the flood-control problems and to consider those tributary streams not theretofore investigated.

The Corps of Engineers limited their initial reinvestigation to Buffalo, Brays, and White Oak Bayous. Local interests have subsequently requested that like consideration be given Sims Bayou.

III. PROPOSED CONTINUED PROTECTIVE WORK

A modification of the existing project is feasible and economically justified under all engineering data and statistics available. Such a modification of the remaining features of the existing project not yet constructed would include clearing, straightening, enlarging, and lining, where required, Buffalo, Brays, and White Oak Bayous and the construction of a desilting basin and structure in Buffalo Bayou above the turning basin for protection of the port, and to reduce maintenance dredging. It is understood that so far as can be determined, the restudy of the interim report by the Corps of Engineers supports such action. It is also understood that the recommended improvement of Buffalo, Brays, and White Oak Bayous for flood control is estimated to cost approximately $50,000,000, excluding work already completed, and that $25,000,000 of this amount represents costs to be assumed by local interests.

Storms in this area, with resultant excessive rainfall, are certain. Larger storms occurring at frequent intervals would completely disrupt industry and business of the city and port of Houston. Uninterrupted conduct of these vital defense needs is essential to the State and Nation. The rapidly accelerating

development at a phenomenal rate continues. Increased rate of runoff, with inadequate capacity of the main streams, creates a potentiality of high loss of lives and property under large storm conditions. Adequate planning and carrying out of protective measures is imperative. Scope of the plans already made should be enlarged. Modifications should be made promptly and expeditiously to adapt the prosecution of the work to changed conditions.

It is earnestly requested that your committee give consideration to immediate appropriation of funds for planning, and continued construction on Buffalo Bayou of not less than $1,000,000 at this session of Congress. We most earnestly petition that early authorization be given by Congress to the recommended work contained in the review report prepared by the Corps of Engineers, including adequate provision for flood control or Brays Bayou. Local interests will pledge adequate contributions to prosecution of the work.

We have endeavored to include the essentials of the matter in the foregoing to illustrate the importance of adequate and proper measures of protection. The undersigned stand ready to supply or submit such additional matter as the committee may deem proper or necessary, and pledge their continued aid to this essential protective project.

Respectfully submitted.

HARRIS COUNTY FLOOD CONTROL DISTRICT,
By ERNEST H. KNIBB, *General Attorney.*
HARRIS COUNTY,
By BOB CASEY, *County Judge.*
HARRIS COUNTY-HOUSTON SHIP CHANNEL AND NAVIGATION DISTRICT,
By W. F. HEAVEY, *General Manager.*
CITY OF HOUSTON,
By J. M. NAGLE, *Director, Department of Public Works.*
HOUSTON CHAMBER OF COMMERCE,
By W. B. BATES, *President.*

(The address of all of the parties is Houston, Harris County, Tex.)

PORT OF HOUSTON,
Houston 11, Tex., June 29, 1951.

Senator TOM CONNALLY,
United States Senate, Senate Office Building, Washington, D. C.

DEAR SENATOR CONNALLY: Following up my visit in Washington with you, I am enclosing herewith a brief summary of the situation regarding the reduction in the appropriation for new work for the Houston ship channel from $1,500,000 to $500,000 by the House Appropriation Committee. I understand this matter will come up before the Senate Appropriations Committee in the near future, and we certainly hope that you will be able to convince that committee that the Houston ship channel should not suffer the heavier reduction than the average for all the river and harbor work. Of course we would prefer to see the entire appropriation of $1,500,000 go through as recommended by the Bureau of the Budget.

With kind personal regards, I am,

Sincerely yours,

W. S. BELLOWS, *Chairman.*

MEMORANDUM FOR SENATE APPROPRIATION COMMITTEE RE HOUSTON SHIP CHANNEL, TEXAS

The Bureau of Budget recommended $1,500,000 for new work appropriation to continue the deepening of the Houston ship channel from 34 to 36 feet.

Although the House Appropriations Committee cut the total program for all river and harbor new work by 20 percent, it cut the Houston ship channel from $1,500,000 to $500,000, or about 67 percent.

The Houston ship channel carries the second largest tonnage of any of our deep-sea ports and there is urgent need of completing the 36-foot project.

Most of the deepening so far accomplished will be of little avail until the entire project is completed.

It is, therefore, urged that the Senate Appropriations Committee restore the appropriation figure to $1,500,000 or, if this is not possible, at least restore it to $1,200,000, which would be the average 20-percent cut made on the entire program.

HOUSE OF REPRESENTATIVES,
Washington, D. C., June 15, 1951.

Senator KENNETH MCKELLAR,
Senate Office Building, Washington, D. C.

DEAR SENATOR MCKELLAR: The House Appropriations Committee has completely eliminated all funds requested by the Corps of Engineers for planning and surveys. I think that this was a great mistake and I certainly hope that the Senate will restore a substantial amount for this purpose.

As I have discussed with you, I am very much interested in the proposed Helenwood and Devils Jumps Dams on the Big South Fork of the Cumberland River, and the Public Works Committees of both the Senate and the House have requested the Corps of Engineers to bring the data on these projects up to date. Of course some funds will be necessary to complete this work. If you could obtain some starting appropriation for the planning and survey of these proposed dams, I would most sincerely appreciate it. The dams would produce about 85,000 kilowatts and the cost would be very low compared with many others. They are located just a few miles from the transmission line from Wolf Creek Dam to Norris Dam and practically no transmission line would be required. Electricity is badly needed. I understand that $30,000 would be sufficient to bring all this data and cost estimates up to date.

With very best regards, I am,

Sincerely,

HOWARD H. BAKER.

APPALACHIAN ELECTRIC POWER CO.,
Roanoke 9, Va., July 26, 1951.

Hon. KENNETH MCKELLAR,
Senator from Tennessee, Washington, D. C.

DEAR SIR: With regard to the effect of the proposed discontinuance of operations of Big Sandy River lock and dam No. 1, particularly as concerns the effect upon industries using the water in the pool formed by that dam:

On June 29, 1951, notification of the cessation of operation of Big Sandy River dam No. 1, effective September 30, 1951, was sent out by the United States district engineer's office, Huntington, W. Va. On July 2, 1951, a hearing for all interested parties was held at Huntington. Representatives of this company were present.

If presently announced plans are carried out, it means that the water level in Big Sandy pool No. 1, which was originally at elevation 512 feet and which has in more recent years been maintained at elevation 508 feet, will be lowered to elevation 498.5 feet being controlled by dam No. 29, on the Ohio River, 2.8 miles below the mouth of Big Sandy.

The principal water users other than Appalachian Electric Power Co. are Catlettsburg, Kenova, Ceredo Water Co.; Ashland Oil Refining Co.; Tennessee Gas Transmission Co.; United Fuel Gas Co.; and Carbide & Carbon Chemical Co.

Our Kenova steam electrical plant is located about 0.6 mile above dam No. 1 and at this time is essential in our capacity porgram. Moreover, it is strategically located in the tri-State region from the standpoint of electrical service to the Huntington-Ashland section. If the present level of Big Sandy No. 1 pool is lowered to the proposed elevation of 498.5 feet, we will be unable to operate the Kenova power plant at all.

The lowest pool elevation at which it would be feasible to operate our plant would be at elevation 503.5 feet, i. e., 5 feet higher than the level which would be maintained by dam No. 29. Operation at even that level would be at reduced efficiency and would first require material changes in our intake.

It is estimated that a capital cost in excess of $100,000 would be required to permit plant operation with a pool level as low as 503.5 feet. Also there would be approximately $7,000 per year of additional operating expense. We understand that other affected water users would have to spend appreciably more than this company.

It is our understanding that if authorized to maintain the dam in service, holding the pool at present level of 508 feet, the Army engineers could continue the operation of this dam at a cost of about $10,000 per year.

This navigation dam was constructed about the year 1905 and the present water users made their installations predicated on the higher water level afforded by Big Sandy dam No. 1.

In view of the number of water supplies and the operation of essential plants affected, should the Army engineers carry out the announced plans, and in view of the present defense emergency with the short supply of and time required to obtain critical manufactured materials, it will be practically impossible to complete the work necessary to permit these plants to continue to operate.

We strongly urge you and other members of the Appropriations Committee to give serious consideration to these important matters to the end that this water supply at our Kenova plant and other plants will not be interrupted.

Respectfully submitted.

M. C. FUNK,
Vice President and General Manager.

RICHMOND, VA., *July 16, 1951.*

Senator KENNETH MCKELLAR,
United States Senate, Washington, D. C.:

In regard to bill passed by House changing Buggs Island Dam and Reservoir name to John H. Kerr Dam and Reservoir our family and friends urge you to do all in your power to retain the Kerr name because many Virginians are deeply grateful for the services performed by Judge Kerr for our State as well as North Carolina.

WILLIAM D. DUKE.

RICHMOND HOTELS, INC.,
Richmond, Va., July 25, 1951.

Senator KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee, Washington, D. C.

DEAR SENATOR MCKELLAR: I enclose copies of letter which I have written to Senators Byrd and Robertson, of Virginia, in behalf of Hon. John H. Kerr in connection with the changing of the name of Buggs Island located in Mecklenburg County, Va.

I sincerely hope that you will use your influence to give the honor to Judge Kerr who, in my opinion, deserves it.

Sincerely,

LEE PASCHALL.

JULY 25, 1951.

Hon. HARRY F. BYRD,
United States Senate, Washington, D. C.

DEAR SENATOR: I noticed in the Times Dispatch a few days ago that there was some opposition to changing the name of Buggs Island Dam to the Kerr Dam and Reservoir.

I was born and grew up within a few miles of Buggs Island which came into prominence when the Federal Government appropriated money to begin the construction of the dam. I cannot recall having ever heard the name Buggs Island during my boyhood days and until I heard Judge Kerr mention it. In other words, the name had no prominence until the appropriation was made.

I know that the judge worked night and day to get the appropriation under way, and so far as I know he was about the only one in the community who did much about this development.

I have made inquiry and, so far as I have been able to find out, a large number of the citizens of Mecklenburg County are in favor of changing the name to the Kerr Dam and Reservoir.

Judge Kerr came to Warren County, N. C., from Caswell County, N. C. I believe that one or both of his parents were born in Virginia.

Taking everything into consideration I feel that the judge in entitled to the honor and I sincerely hope that you, Senator Robertson, and Congressman Abbitt will not do anything to prevent him from receiving the honor which he has so richly earned.

With kindest regards.

Sincerely,

LEE PASCHALL.

P. S.—A similar letter was sent to Senator Robertson of Virginia.

NEW YORK, N. Y., *June 28, 1951.*

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.:

American Merchant Marine Institute, Inc., representing 70 United States Steamship companies operating approximately 8,000,000 tons of American-flag dry cargo, tank, and collier vessels in the domestic and foreign trades of United States strongly recommends incorporation in civil functions appropriation bill, H. R. 4386, of following provision which appeared in general appropriation act, 1951, "Alteration of bridges over navigable waters" for payment of the share of the United States of the cost of alteration of bridges over navigable waters in accordance with the provisions of the act of June 21, 1940 (Pub. Law 647), $900,000." Urgent, long-delayed reconstruction B. & O. bridge over Arthur Kill Channel, New York Harbor, should be given serious consideration.

R. J. BAKER, *Secretary.*

NATIONAL RIVERS AND HARBORS CONGRESS,
Washington 6, D. C., July 17, 1951.

Hon. KENNETH D. MCKELLAR,
Chairman, Appropriations Committee,
United States Senate, Washington 25, D. C.

DEAR MR. CHAIRMAN: We understand from your office that it is your desire to close the hearings on the civil-functions appropriation bill at the earliest possible date, and I therefore submit for inclusion in the record of the hearings before your committee the following:

(*a*) President's call for special meeting of officers and directors;

(*b*) Report of the projects committee, which was unanimously adopted at the above meeting; and

(*c*) Resolutions which were likewise unanimously adopted.

We should greatly appreciate it if these could be included in the record of the hearings before the subcommittee on the civil-functions appropriation bill for 1952 in lieu of a personal presentation.

Respectfully yours,

WILLIAM H. WEBB,
Executive Vice President.

NATIONAL RIVERS AND HARBORS CONGRESS

Washington 6, D. C.

PRESIDENT'S CALL FOR SPECIAL MEETING OF OFFICERS AND DIRECTORS

Whereas since June 25, 1950, the Armed Forces of the United States have been engaged in conflict with the forces of a foreign nation; and

Whereas on December 16, 1950, President Truman proclaimed the existence of a national emergency; and

Whereas, it now appears unlikely that the armed conflict hereinbefore referred to will be settled in the very near future; and

Whereas the threatening international situation continues to constitute a grave peril to our domestic peace and tranquillity:

Now therefore I, John L. McClellan, president of the National Rivers and Harbors Congress, hereby issue this call for a special meeting of the officers and directors of the said congress to convene at the Mayflower Hotel in the city of Washington, District of Columbia, on Friday, the 11th day of May 1951, at the hour of 1 p. m., eastern daylight saving time, to take such action as may be deemed appropriate or desirable in the premises.

The permanent projects committee of the congress will meet at 10 a. m. on Thursday, May 10, 1951, in the Mayflower Hotel, to consider individual projects for which the endorsement of the congress is desired. The committee's rule requiring personal appearance before it is waived, and proponents of projects are requested to furnish in writing and by mail the supporting data called for by the committee for each project. (Application blanks will be sent upon request to this office.)

Presidents, or the executive heads, of chambers of commerce; navigation, flood control, irrigation-reclamation and conservation associations; industrial, business, agricultural, labor, and civic organizations, are invited to attend the meeting of the officers and directors of the congress and to give them the benefit of the views of the organizations referred to.

Assurance has been given by the management of the Mayflower Hotel that sufficient accommodations will be available provided a majority of those attending share double rooms. Early reservations are, therefore, advisable in order to insure satisfactory arrangements.

Dated at Washington, D. C., this 15th day of March, A. D. 1951.

[Seal]
Attest:

J. G. BURKE,
Secretary.
JOHN L. MCCLELLAN,
President.

REPORT OF THE PROJECTS COMMITTEE

WASHINGTON, D. C., *May 11, 1951.*

HON. JOHN L. MCCLELLAN,
President, National Rivers and Harbors Congress,
Washington, D. C.

DEAR MR. PRESIDENT: In pursuance of the call of the President, your projects committee met on May 10, 1951, to consider the projects submitted since the last session of the National Rivers and Harbors Congress. Hearings were afforded all who made appearance.

The committee at this session has examined 44 proposals embracing all resource improvements with which this congress is concerned, including navigable waterways, harbors, flood control, soil conservation, reclamation, and water conservation.

Of the proposals examined this committee is convinced that 17 constitute projects sound in conception, needful, and sufficiently advanced in status to warrant endorsement, involving a total estimated cost of $231,823,180. Nine proposals appear to be without sufficiently advanced development to warrant project endorsement at this time, but are believed to be meritorious and entitled to further consideration by this committee, if and when additional information may be adequate to warrant an endorsed status. We find that on 13 proposals surveys have been authorized, but the reports on such surveys have not been completed, and we, therefore, recommend in these cases that the Congress request the appropriate authority to complete reports of its investigations and surveys as soon as practicable in order that action may be taken toward classification by this Congress. We find three proposals, which on preliminary examination appear to be desirable and needful, and we accordingly recommend that engineering and economic investigations of survey scope be made in these cases with a view to developing projects for subsequent authorization. Of the proposals investigated we find two are without necessary data or sponsorship to enable the committee to reach a reasonable conclusion on their worth. However, we desire to give the applications sympathetic consideration, and, if possible, offer to the proponents the services of this congress in reaching a solution to their problems. We have, therefore, not classified these but have suggested that the secretary communicate with the applicants concerned and request additional data upon the receipt of which further consideration will be given to their proposals.

Appendix A of this report sets forth in detail a list of all proposals and projects examined and the action taken thereon.

Since the session of this organization a year ago, a major omnibus flood-control and river and harbor bill (R. R. 5472) was enacted into law and approved on May 17, 1950 (Public Law 516, 81st Cong.), supplementing and expanding previous flood-control and river-and-harbor law. Additional projects were authorized, as well as additional investigations of other desired navigation and flood-control improvements. However also in the last year, the threatening international situation has required a greater concentration of our national activities on defense, and investigation and construction of projects not clearly having defense aspects have been curtailed.

Your projects committee wishes to point out that many navigation, flood-control, drainage, irrigation, and other projects improving the use of our rivers and land and water resources have important defense values, either immediately to the military or to civilian and industrial activities concerned with the defense

effort. Works already accomplished, such as flood protection of the great industrial center of Pittsburgh; multiple-purpose developments for flood control, water supply, power, and other uses, as in the Ohio, Missouri, and Columbia River Basins; and various projects affecting food and fiber production readily illustrate the important place and great value that the national program of river-and-harbor development have in our present crises, as well as in normal peacetime pursuits. Both defense and ordinary economic values illustrate the foresightedness of the Congress of the United States in formulating a national policy and program for the development of our natural resources and for the security and welfare of our people.

For the immediate future, it will be necesary to concentrate on those water resource development investigations and projects necessary to our security as a Nation. These projects will, of course, also have important beneficial effects on the civilian economy, as in the past. When peace becomes once more secure, we can look forward to reexpansion of river and harbor development for the added purpose of increased peacetime activities and for gaining and enhancing increasingly higher living standards.

We renew our former recommendation that at least $70,000,000 be provided annually for maintenance of rivers and harbors.

Respectfully submitted.

SID SIMPSON, *Chairman.*

NOTE A.—A project which has been placed in class II, III, IV, or V by the committee may be reexamined from time to time upon due application and the submission of material supplementary information, with a view to advancing its classification; but no project will be reported upon by the committee more than once in each year.

NOTE B.—Attention is called to the fact that when a project is once put in class I endorsed, such status continues and it is unnecessary to follow up at subsequent sessions with new applications. All projects "endorsed" by the Congress, upon the recommendation of the committee, retain their status until finally constructed, unless such action is rescinded by the Congress, and the Congress stands pledged to do everything possible to assist in reaching that goal.

APPENDIX A

[Letter "R" following the project number indicates revision of a previous application]

CLASS I.—*Projects endorsed*

Endorsed.—This means that the committee is convinced that the project is sound, needful and sufficiently advanced in status, and should be promptly constructed in the public interest.

Project number	Name of project	State	Division
709-R-3	Monongahela River, Opekiska and Hildebrand locks and dam.	West Virginia	Ohio River.
722-R-3	Cape Fear River at and below Wilmington (including widening the transition channel at the downstream end of the anchorage basin).	North Carolina	South Atlantic.
741-R	Boston Harbor, extension of President Roads anchorage.	Massachusetts	Northeast.
744-R-3	Oregon Inlet and related channels	North Carolina	South Atlantic.
745-R-3	Masonboro Inlet	do	Do.
748-R-2	Norfolk Harbor-Craney Island disposal area	Virginia	North Atlantic.
769-R	Weymouth Fore River	Massachusetts	Northeast.
817-R	Ohio River, New Cumberland locks and dam	Ohio and West Virginia.	Ohio River.
828-R	Mystic River	Massachusetts	Northeast.
854	Central and southern Florida flood control project	Florida	South Atlantic.
856	McLean Botton levee district bank protection works on Arkansas River.	Arkansas	Southwest.
859	Kawaihae Harbor	Hawaii	South Pacific.
861	B. & O. Railroad Bridge (also known as the Staten Island Rapid Transit Railway Co. drawbridge) over the Arthur Kill.	New York and New Jersey.	North Atlantic.
862	Vincennes flood-protection project	Indiana	Ohio River.
866	Hanapepe River flood control	Hawaii	South Pacific
867	Kawainui swamp flood control	Hawaii	South Paific.
869	Middle Rio Grande Basin, comprehensive plan for flood control and reclamation.	New Mexico	Southwest.

CLASS II.—*Projects classified as meritorious*

Meritorious.—This means that the committee believes that although the project is not sufficiently advanced in status to warrant its present endorsement, it is meritorious and open for further consideration by the committee.

Project No.	Name of project	State	Division
648–R	Aguadilla Harbor, improvements	Puerto Rico	South Atlantic.
768–R	Chelsea River	Massachusetts	Northeast.
781–R–2	Raystown Reservoir, Juniata River, and tributaries	Pennsylvania	North Atlantic.
790–R–2	Hudson River, New York to Albany	New York	Do.
793–R–2	Cleves flood-protection project	Ohio	Ohio River.
843–R	Farmers' levee and drainage district (levees east of Chandlerville).	Illinois	Great Lakes.
858	Honolulu Harbor	Hawaii	South Pacific.
860	New York Harbor, South Channel	New York	North Atlantic.
871	Saline River (Benton Dam)	Arkansas	Lower Mississippi Valley.

CLASS III.—*Expeditious report on authorized survey requested*

Expeditious report on authorized survey requested.—This means that the committee believes the Congress should request the engineering authority to expedite the report of its investigation and survey of the project to the end that appropriate further action may be had thereon in regard to classification by the Congress.

Project Number	Name of project	State	Division
725–R–3	Carolina Beach	North Carolina	South Atlantic.
770–R	Saginaw River Basin flood-control project	Michigan	Great Lakes.
837–R	Mobile Harbor	Alabama	South Atlantic.
852	Norfolk Harbor and Thimble Shoal Channel	Virginia	North Atlantic.
853	Town River, Quincy	Massachusetts	Northeast.
855	Savannah Harbor	Georgia	South Atlantic.
857	Cache River-Bay Creek development	Illinois	Ohio River.
863	Boston Harbor, reserved channel	Massachusetts	Northeast.
865	Portsmouth Harbor and Piscataqua River	New Hampshire	Do.
868	Cumberland River, Big South Fork (Helenwood and Devils Jumps projects).	Tennessee and Kentucky.	Ohio River.
870	Delaware River, Philadelphia to the sea and Philadelphia to Trenton.	Pennsylvannia, New Jersey, and Delaware.	North Atlantic.
872	Willapa River Channel, widening Willapa Harbor	Washington (Pacific County).	North Pacific.
879	Miami River and mouth	Florida	South Atlantic.

CLASS IV.—*Projects recommended for survey*

Recommended for survey.—This means that the committee believes that sufficient showing on behalf of the project has been made to warrant further examination in the form of an adequate survey by an appropriate agency of the Federal Government.

Project number	Name of project	State	Division
864	Monongahela River, lock and dam No. 5, replacement	Pennsylvania	Ohio River.
873	Brazos Harbor, slip channel and turning basin	Texas (Brazoria County).	Southwest.
874	Myrtle Grove Sound pollution	North Carolina	South Atlantic.

RESOLUTIONS UNANIMOUSLY ADOPTED BY THE OFFICERS AND DIRECTORS OF THE NATIONAL RIVERS AND HARBORS CONGRESS MAY 11, 1951

I. THE PRESIDENT'S WATER RESOURCES POLICY COMMISSION

The National Rivers and Harbors Congress believes the President's Water Resources Policy Commission, together with its staff and the large numbers of key personnel drafted from existing Federal agencies, has done a magnificent job of collecting from numerous sources into a single three-volume report the law, practice, and public opinion on the many ramifications of the development of water and land resources. We are cognizant of the hard, painstaking, and often discouraging work involved in this Herculean task, and we commend the Commission and its collaborators for resoluteness in their task of research. With respect to the policy outlined by the Commission, however, this Congress is constrained to reserve the right to object to a number of the radical measures recommended. For example, throughout the recommendations on planning and evaluation, expressing the Commission's opinion on the need for coordination, multiple-purpose approach, basin-wide development, comprehensive planning, etc., little, if any, recognition is given to the great advances that the existing Federal agencies have made toward these ends, except in the case of the TVA or valley-authority type of development. This Congress has repeatedly expressed its opposition to this type of socialistic basin development for good and valid reasons and it does not now believe there is any good to be gained by resorting to valley authorities, basin commissions, or superreview boards. America is richly endowed with natural resources, and the United States has done more than any other nation in the development of these resources by methods and agencies that, while not without fault, have and are continually and continuously revising and improving their operations. It is incomprehensible to this Congress why superplanners seem invariably to conclude that we should either discard existing agencies and the painstaking progress that has been made or superimpose over such agencies commissions and boards that would inevitably hamper operations and nullify the progress existing agencies are now making toward improved basin development. The Commission has collected the material requisite to a thorough study of the policies and practices in the development of our land and water resources, but we caution the American people and memorialize the Congress on the need for extended and comprehensive public hearings on any legislation designed to put into law any part or all of the recommendations of the President's Water Resources Policy Commission.

II. APPROPRIATIONS

We fully recognize and applaud the wisdom of the President's recommendations that nonessential spending should be avoided, that nondefense spending should be curtailed, and that great care should be exercised in the allocation and conservation of critical materials. We believe it to be entirely appropriate and consistent with these worthy goals of economy and conservation to urge upon the Congress the appropriation of adequate funds to prosecute, at an economical rate, those internal waterway improvements that are under way and to initiate those improvements for navigation and flood control that have a direct beneficial effect on our defense program. It is prudent to avoid the waste that would result from the suspension of incomplete flood-control works that might be lost before work could be resumed and foresighted to prosecute and maintain those navigation projects that have in the past and will in the future avoid the transportation jams and failures that would cripple our defense efforts.

III. NEW STARTS

We believe that greater recognition should be given to the changing emphasis on public works to facilitate the present defense effort in order that improvements can be intiated that make possible cheap transportation for critical ores and materials, that provide hydroelectric power for increased production, and that reduce or eliminate the hazard of floods in vital food-producing areas and industrial centers. The general prohibition against new starts that has been prescribed by the Bureau of the Budget for the past several years hampers a realistic program of public improvements having high defense values. As expressed elsewhere in these resolutions, we commend the practice of continuing

projects now under way at the maximum practicable rate, but we submit that under the present changed emphasis there are a number of new projects that are just as important, if not more important, to our defense effort than some of the works under way. It is accordingly urged that the almost inflexible restriction against new starts that has prevented the initiation of urgently needed works be reexamined in the light of the present situation and be lifted with respect to a greater number of worthy new projects.

IV. PRIORITY PREFERENCE RATINGS

Other than provisions for troops and the manufacture of munitions and war machines, there is no kind of public project that contributes to national defense as much as improvements for waterway transportation to relieve congested railroads and highways and for flood control to protect the workers' homes and avoid jeopardizing the defense effort by halting production, by crippling transportation facilities, and by interrupting communications generally. It is just as important, if not more important, to protect existing homes and industrial centers as it is to build new homes and facilities. Disruption of vital transportation facilities required for the supply and distribution of essential freight and the disorder that floods cause over vast regions, including flood-producing areas as well as defense industries, should be avoided by all practical means. The Government should not have to be diverted from its defense effort to rehabilitate flood victims and restore order. Experience gained in two world wars has proved that navigation and flood-control improvements are vital to a defense effort, and accordingly we urge that they be given whatever priority preference ratings are necessary to assure their construction and maintenance.

V. HYDROELECTRIC POWER

Consonant with the effort to increase production in connection with our national-defense effort, the National Rivers and Harbors Congress is pleased to reaffirm its position in favor of the production of hydroelectric power as a phase of economically justified multiple-purpose development of our water resources whenever and wherever power development is consistent with the other purposes of the authorized Federal projects. At the same time, however, we repeat our opposition to unnecessary competition with the private power industry and particularly to the construction of duplicating facilities in what appears in some instances to be a deliberate attempt to throttle private enterprise.

VI. CORPS OF ENGINEERS

The National Rivers and Harbors Congress unanimously reaffirms its unqualified confidence in the Corps of Engineers of the United States Army. For more than a century this corps has supervised the unmatched development of navigation and flood-control improvements of our country with a sense of integrity and devotion to duty that is unsurpassed by any group of men anywhere. This great organization in peace and war and other emergencies has shown itself to be capable of orderly expansion, without fanfare or loss of efficiency, to take care of whatever tasks may be assigned to it. We are accordingly opposed to any changes that would affect adversely its jurisdiction over navigation and flood-control improvements.

VII. BUREAU OF RECLAMATION

We believe that the Bureau of Reclamation and other agencies of the Department of Interior concerned with the development and utilization of natural resources have done superior work in their respective fields of basin development. Moreover, they have been alert to improve their standards and methods as experience has been gained and additional basic data have been accumulated. It is our opinion that the Nation is best served by continuing, under the competent jurisdiction of these agencies, the work in which they have become undisputed experts.

VIII. DEPARTMENT OF AGRICULTURE

As in the case of the Corps of Engineers and the several agencies of the Department of Interior concerned with their particular phases of the protection, development, and utilization of natural resources, we believe the Department of Agriculture is the recognized authority on soil conservation, reforestation, and upstream

waterflow retardation. It would be imprudent to waste the experience of the personnel of this agency gained over long years of practice, and this Congress is opposed to any change in the authority they now exercise over the work that has been entrusted to them.

IX. THE AMERICAN MERCHANT MARINE

The National Rivers and Harbors Congress reaffirms its advocacy of a strong efficient modern American merchant marine as an indispensable adjunct in the continued development and maintenance of the foreign trade of the United States and the preservation of the high standards of the domestic economy of our country. The full utilization of our water-transportation facilities in the domestic deep-sea trades and the inland waterways, as well as the foreign offshore maritime services is the only practical and economical means of insuring the availability of such services modern and efficient and adequate for the many communities they are best able to serve.

As on numerous previous occasions, the American merchant marine has again in the Korean War proven its indispensable value to the security of our Nation in a national emergency because American-flag vessels were available to perform the services required. Likewise, the current military defense and preparedness program must recognize the importance fo the maritime facilities of our Nation and give to them first priority consideration in progressive projects. The United States, necessarily a world trading people inherent in the great volume of our domestic production, must be a leading maritime nation and should not and cannot be dependent upon foreign-flag shipping for either its foreign trade or its national defense.

The National Rivers and Harbors Congress urges the Congress of the United States to recognize the sentiments of the people throughout their country that their best interests are served by their representatives in Congress through the development and maintenance of our water-transportation facilities as essential to our prosperity, with particular reference to the water carriers in the foreign trade, the domestic coastwise and inland waterways, the shipbuilding and repair facilities, and the maintenance of adequate harbor facilities of our expansive coast line to adequately service the commerce of our Nation.

TESTIMONY OF CONGRESSMAN JAMES G. FULTON OF PENNSYLVANIA BEFORE SENATE APPROPRIATIONS COMMITTEE ON CONEMAUGH DAM

I am testifying before your committee as the Congressman for the Thirty-first District of Pennsylvania, representing the southern portion of Allegheny County, in favor of the full $10,000,000 appropriation for the Conemaugh Dam. It is essential to the protection of this large industrial area that this vital dam be completed according to schedule so that we will not suffer a repetition of the destructive 1936 flood.

Already the reductions in these appropriations for the Conemaugh Dam in previous sessions of Congress have delayed construction 2 years beyond the original estimates. In addition the inflation has now increased the amounts necessary to complete the project, so that the Army engineers advise that $12,331,300 is now required. This will make the dam cost a total of $47,500,000 instead of the original estimated $30,457,000. Any further delays or cuts in appropriations will only add to the total cost and result in possible tragedy to this extensive industrial area.

With the current Russian menace it is vital to the whole country to protect this large steel center around the Pittsburgh district and insure against any destruction which would result in curbing our defense production. The full $10,000,000 requested for this program must be provided for the next fiscal year, and I am urging your committee to see that the amount cut from this bill by the House of Representatives is restored.

If the House of Representatives take action to assist financially on other recent disastrous floods which have occurred in other parts of the country, surely the full appropriation for this vital flood protection in the heart of the Nation's industrial area must be restored. To cut this appropriation would endanger the lives and welfare of over a million people as well as upset the whole defense production of the United States.

The reduction in this amount would limit the amount of clearing which could be completed in the reservoir area and might result in collecting large quantities of debris behind the dam, which would be expensive to remove. The cut would limit the program of construction and make it impossible to complete the installation by the end of 1952 as scheduled. Such false economy as decreasing the necessary appropriation would restrict the amount of work that could be accomplished in connection with the relocation and alterations of the branches of the Pennsylvania Railroad, which must be completed before adequate flood protection is provided.

It is estimated that this cut would delay the completion of the project by a whole year, and it is therefore necessary that your committee restore the full amount needed to safeguard the lives of the people of this district and the defense of our country.

UNITED STATES SENATE,
Washington, D. C., July 31, 1951.

Senator KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
Senate Office Building, Washington, D. C.

For your information inasmuch as this question was raised during the hearings yesterday and because I will want to raise the question again with the committee at the time of the mark-up.

HOMER FERGUSON,
United States Senator.

JULY 31, 1951.

Brig. Gen. CLAUDE H. CHORPENING,
Corps of Engineers,
Gravelley Point, Washington 25, D. C.

DEAR GENERAL CHORPENING: At yesterday's hearings before the Senate Appropriations Subcommittee the question was raised as to the cost of transferring the engineers' dumping ground for Rouge River dredgings from the present point at the head of Fighting Island to what is known as the Lake Erie dumping ground further down stream.

In previous correspondence you have estimated that the cost of such an operation would be increased from $75,000 to $225,000. As I indicated at the hearings yesterday, I have been unable to understand why it would cost three times as much to transport the dredgings for the additional eight miles even allowing for the fact that the dredging crew would not be working during the time the transporting is done.

This is to request that you supply me for reference to the Senate Appropriations Committee your minimum estimate of comparative costs in transferring the dumping ground in the manner recommended by the Michigan Water Resources Commission and the city of Wyandotte. I should appreciate it if you would accompany your estimate with a breakdown of the cost factors involved.

With best personal wishes, I am

Sincerely yours,

HOMER FERGUSON,
United States Senator.

STATEMENT OF SENATOR FERGUSON

(See p. 1399.)

Mr. Chairman, in order that it may be a part of the record, I would like to direct the committee's attention to the appropriation for current expenses and particularly to the budget request for examinations and surveys.

As I understand it, the House denied $1,500,000 under this appropriation request, including $300,000 for survey of northern and northwestern lakes. The basis upon which the specific denials were made was a blanket disallowance of preliminary examinations and surveys. "Survey of northern and northwestern lakes" is a deceptive appropriation title, and it therefore came within this blanket disallowance.

What I want to point out to the committee is that this survey is in no way related to preliminary examinations and surveys conducted by the Corps of Engineers. These lake surveys are entirely operational, and are essential to the maintenance of the great inland shipping waterway on the Great Lakes.

Perhaps the best way to clear up any misunderstanding with respect to these lake surveys is to say that the Lake Survey Office under the Army engineers performs for the Great Lakes substantially the same functions which the Coast and Geodetic Survey performs in seaboard waters.

I would like to incorporate as a part of my statement an explanation of the work of the lake surveys as it has been furnished by the engineers:

"A. * * * The Lake Survey conducts the necessary hydrographic and topographic surveys, compiles, reproduces and publishes 143 charts which are essential to navigation on the Great Lakes system. The importance of these charts are illustrated by the following:

"(1) The Great Lakes ore carriers and other commercial vessels carrying defense material, and Coast Guard and other Government craft cannot safely operate without up-to-date navigation charts.

"(2) The charts are used for training purposes by the Coast Guard, Naval Reserve and various Army units.

"(3) Approximately 50,000 charts are sold annually and an additional 10,000 are issued for official use.

"(4) To be effective, charts must be revised periodically by actual field checking, and must be hand corrected for changes in lights and buoys to date of sale.

"B. The Great Lakes Pilot, a book of more than 500 pages, is published annaully to supply navigation information which cannot be shown on the charts. The importance of this book is illustrated by the following:

"(1) The Pilot book is essential for safe navigation of vessels engaged in transporting iron ore and other defense materials.

"(2) Seven monthly supplements of the Pilot are issued during the period May to November, the navigation season, to keep the book up to date.

"(3) The importance of the publication is illustrated by the fact that 1,600 copies of the Pilot are sold annually and 500 additional copies are issued for official use.

"C. Water level records are obtained for all of the Great Lakes and connecting waters. The importance of this activity is illustrated by the following:

"(1) Each inch of draft is important to the ore carriers in hauling the vital material to the lower lakes. Pertinent water-level values are furnished the Lake Carriers Association twice monthly to enable them to adjust load limits.

"(2) In one area the knowledge of existing water levels is so vital that readings from a Lake Survey gage are broadcast by the Coast Guard to approaching vessels at regular intervals throughout the day.

"(3) A monthly report of water levels and forecast of future levels is mailed to approximately 500 individuals and organizations, such as public utilities and waterfront shipping interests.

"(4) A hydrograph showing the monthly mean water levels of all the Lakes from 1860 to date is published to supply information on seasonal and long-range fluctuations. This information is particularly valuable in the building of wharves, intakes, and other marine structures.

"(5) Water levels of Lake Superior are supplied each 10 days to the International Control Board for Lake Superior to be used in connection with regulation of that lake. The level of the lake could not be satisfactorily controlled without this information.

"Discontinuance of operations of the United States Lake Survey even for a short period of time would be disastrous since the shipment over the Great Lakes of iron ore, oil, coal, grain, and other commodities essential to national defense and to the national economy will become hazardous and impractical. The proposed appropriation of $300,000 requested by the President for continuing the important functions of the United States Lake Survey is approximately 30 percent lower than last year's appropriation and represents the bare minimum required to carry on this work which is essential for national defense and the national economy. It is, therefore, considered imperative that the full amount be restored."

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
August 2, 1951.

Hon. KENNETH MCKELLAR,
Committee on Appropriations,
United States Senate, Washington, D. C.

MY DEAR SENATOR MCKELLAR: Agreeably with our telephone conversation, I enclose herewith the letter and map to which I referred in conversation with respect to the upper Monongahela River.

I shall appreciate very much your including this in the record if at all possible.

With kindest regards, I am

Most sincerely yours,

H. M. KILGORE.

JULY 20, 1951.

Hon. HARLEY M. KILGORE,
Senator, United States Senate,
Washington, D. C.

DEAR SENATOR KILGORE: As additional and supporting data and information to our letter of June 18, 1951, addressed to the United States Senate, Committee on Civil Functions, Senate Office Building, Washington, D. C., the following information is submitted:

(*a*) Monongahela is an Indian word meaning "sliding banks" and the Monongahela River in the terms of the Indians was the "river with sliding banks."

(*b*) The railroad services for the coal fields, industries, agriculture, passenger service and work-train service of this area are provided by a single-track line along each bank of the Monongahela River. The Baltimore & Ohio Railroad Co. is the owner of the right-of-way along the eastern bank of the Monongahela River while the New York Central, Pennsylvania, and Baltimore & Ohio Railroads are co-owners of the right-of-way along the west side of the Monongahela River through Morgantown in both the northern and southern directions. Due to the rugged topography and terrain in this part of the Appalachian range of mountains, railroad roadbed construction is extremely costly and, until the development of industries and coal in Monongalia, Marion, Preston, Harrison, and adjoining counties, the additional cost to provide more than single-track roadbed was not justified. The greatly advanced cost of material, equipment and labor required to provide additional roadbed width at this time no doubt will prevent amortization charges for such a project.

Information has been given this office that the capacity of the rail system of the Baltimore & Ohio Railroad between Fairmont, W. Va., and Connellsville, Pa., is badly taxed due to the lack of sidings and the number of trains now operated by the system in this area. The schedule calls for seven trains a day each way through Morgantown on this line. In order to expedite and provide greater volume this section of the system is now operated by Diesel powered locomotives. Two western Maryland trains, with about 80 cars to the train, travel over this single-track line from Elkins, W. Va., to the junction of the main line of the Baltimore & Ohio Railroad near Connellsville, Pa., under the provisions of a 99-year lease agreement with the Baltimore & Ohio Railroad. The single-track system extends from near Uniontown, Pa., through Morgantown to Fairmont a distance of 61 railroad-miles; from Fairmont to Grafton, W. Va., a distance of 25 railroad-miles; or from Fairmont to Clarksburg, W. Va., a distance of 21 railroad-miles, where the company is operating multiple-track systems.

The coowner system along the west bank of the Monongahela River presently accommodates 7 trains each way a day between Fairmont and Morgantown and 14 trains a day each way from 3 miles north of Morgantown to the junction point about 20 miles west of Brownsville. There are 24.2 miles of single-track railroad between Fairmont and Morgantown and 45.2 miles between Morgantown and the junction point near Brownsville, Pa. About 3 miles of roadbed from lock No. 10 north along the Monongahela River is a continuous and perpetual maintenance problem due to the banks supporting the roadbed sliding into the Monongahela River. Other sections along the west bank of the river are equally objectionable and expensive to maintain due to "slips" and "slides" of the upper banks along the roadbed.

(*c*) The highway system over practically all of northern West Virginia consists of the old-fashioned two-lane graded and paved roadways, following the curves and hills along the same routes as traveled in the horse and wagon days.

The State Road Commission of West Virginia contends that it is unable financially to construct and maintain highways of modern design, permitting four or more lane traffic to replace the present antiquated roadways. During the calendar years of 1948 and 1949 a section of 1.9 miles in length of a highway in Monongalia County was graded and drained, namely, the extension of Beechurst Avenue from Eighth Street in Morgantown to Star City, at a cost exceeding $650,000 or more than $300,000 per mile, with free right-of-way. A part of the project, a two-lane traffic bridge, was constructed over the Monongahela River at Star City at a cost of more than $600,000. During the month of June 1951, the West Virginia State Road Commission awarded three contracts for grading and draining highways in the northern and eastern sections of West Virginia: one of these awards was 0.133 mile in length and the cost was $79,915 or about $600,000 per mile; another was 0.286 mile in length at a cost of $74,045 or about $270,000 per mile; and the third 0.179 mile in length at a cost of $91,350 or about $510,000 per mile. These figures and costs clarify the statements of the West Virginia State Road Commission as to its inability to provide funds for modern-type highway construction.

There is enclosed herewith a United States Geological Survey map, with contours, indicating the mountainous terrain of the area southwest of Fairmont to Morgantown and to the junction of the Monongahela and Cheat Rivers at Point Marion, Pa. Also enclosed are photographs of the track systems through Morgantown that indicate the confined widths upon which the railroad systems must operate.

Giving consideration to the present and future transportation requirements of the Monongahela Valley, with the excessive high costs for construction of modern railroad and highway facilities, and recognizing the present outmoded and antiquated highway and railway systems of the area with the extremely high maintenance costs, it is evident for the well-being and safety of the United States during an emergency period, and as a national defense measure, to insure the full productivity of its mineral and industrial resources that the modernization and use of river transportation along the reaches of the Monongahela River should be expedited.

Very truly yours,

ELMER W. PRINCE,
City Manager.

UNITED STATES SENATE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
August 1, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Committee on Appropriations,
United States Senate

DEAR SENATOR: Attached are two resolutions I have just received from the Columbia Basin Commission, Ephrata, Wash. This Commission was created some years ago by State law to promote development of the Columbia and its tributaries—particularly those portions of the basin which lie within the State boundaries. It is financed by appropriations of the State legislature and, therefore, speaks on river-development matters as the official voice of the State administration.

You will note that the two resolutions urge restoration of funds for Albeni Falls, McNary Dams, and for funds to start Ice Harbor and The Dalles Dams.

Since there has been some confusion in the past as to the position of the State administration, particularly with reference to Ice Harbor and The Dalles Dams, I thought you would want these resolutions in the record to show that the official commission, created to promote basin development, is supporting these projects.

May I take this opportunity to thank you again for the generous patience and courteous treatment you have accorded me, Secretary Chapman, Munitions Board Chairman John Small, and witnesses from the Pacific Northwest, when we were before you supporting funds for these projects.

Kindest personal regards.

Sincerely,

WARREN G. MAGNUSON,
United States Senator.

RESOLUTION

Whereas a delay in the construction program of Albeni Falls Dam would be a severe blow to the power supply of the Pacific Northwest at a time when there is at best a power shortage; and

Whereas Albeni Falls Dam would make additional firm power available to the region faster than any other project and at a low cost at a time when additional power is severely needed in defense; and

Whereas the loss of storage from Albeni Falls in 1952–53 would reduce the power capabilities in a minimum water-year by about 110,000 kilowatts and 80,000 kilowatts in an average water-year, losses which the area cannot afford due to the increasing demands for power for defense and normal activities; and

Whereas the existing shortage in the region is important to the people of the Nation and kilowatts lost by delay in the construction program means a permanent loss of income in power revenue estimated at $2,500,000 annually; and

Whereas aluminum is a vital factor in war production and the Pacific Northwest is turning out 45 percent of the Nation's aluminum, a loss of 110,000 kilowatts of additional power for only 6 months of the year would mean a loss of 28,000 tons of the needed metal valued at about $10,000,000, which represents one-third of the total cost of the Albeni Falls project; and

Whereas, unless the appropriation eliminated by the House of Representatives Appropriations Committee is restored, there will be a construction demobilization and remobilization loss of more than one-half million dollars plus a loss of some work already accomplished under previous appropriations: Now, therefore, be it

Resolved, That the Columbia Basin Commission of the State of Washington hereby requests the United States Senate, through proper committees, to restore the $10,000,000 appropriation for the current fiscal year and seek to permit a continuation of the scheduled construction work in order that the needed power production will be available as quickly as possible and that adequate protection will be provided for the investment already made in this project.

RESOLUTION

Whereas there exists a power shortage in the Pacific Northwest, and that shortage will continue to become more acute year after year as the supply will continue to fall more and more below the demands until there are adequate power dams built on the Columbia River and its tributaries; and

Whereas continued delays in the start of new projects will stand as obstacles in the needed development of the industrial Northwest and will be serious handicaps in the long-range defense planning and production; and

Whereas the Ice Harbor and The Dalles Dams have been adjudged feasible and worthy projects and necessary to bring the Pacific Northwest power supply up to meet the needs: Now, therefore, be it

Resolved, That the Columbia Basin Commission of the State of Washington hereby urgently petitions the United States Senate, through proper committees and on the floor, to restore the $4,000,000 appropriation request for Ice Harbor Dam construction and the $18,000,000 appropriation request for construction on The Dalles Dam, items which were eliminated by the House of Representatives committee; and be it further

Resolved, That the Columbia Basin Commission of the State of Washington urgently petitions that the $6,900,000 reduction in the McNary Dam, which is already under way, be restored.

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
August 1, 1951.

Hon. KENNETH MCKELLAR,
Chairman, Senate Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR SENATOR MCKELLAR: As chairman of the Subcommittee on Civil Functions and Deficiencies, I am enclosing herewith two letters that have come to me since the committee has closed its hearings. One concerns a very important section of Boston Harbor which is much used by tankers. Several oil companies have their tanks up the Mystic River. The channel of Mystic River has filled in to a considerable degree. The tankers have grown in size. As a result,

tankers have to wait in the outer harbor until the tide is high enough for them to go up to their docks. This causes delay and increased expenses. Furthermore, as a matter of defense policy, this situation may become much more vital. It is not a new project. It is one which has been authorized but for which money has never been appropriated. This, I believe, is the most important part of the letter concerning Boston Harbor.

I also enclose a letter from Edwin F. Eldredge, chairman of the Board of Selectmen of Chatham, Mass., relative to Chatham Harbor. The letter explains itself. This is not a project in the meaning of that word. It is simply the problem of digging out a harbor of refuge where it has silted in.

I would appreciate very much if it is possible to do so for your committee to consider these projects and to insert the requests in the hearings of the committee.

Thanking you, I am

Sincerely yours,

LEVERETT SALTONSTALL.

MARITIME ASSOCIATION
OF THE BOSTON CHAMBER OF COMMERCE,
Boston 10, Mass., July 13, 1951.

Hon. LEVERETT SALTONSTALL,
United States Senate,
Senate Office Building, Washington, D. C.

DEAR SENATOR SALTONSTALL: It is understood that the appropriations bill, which includes the civil works funds for rivers and harbors work, is now before the Senate for consideration. It is understood also that the only item for Massachusetts, included in the total of $14,164,500 allocated for channel work throughout the entire United States, is an item of $200,000 for Fall River, Mass. The Southern States are allocated $9,653,000 out of the total of $14,164,500. In addition, the maintenance dredging has been reduced from the $41,0000,00 recommended by the Budget Bureau to $39,000,000.

Considering the vast extent of our harbors and waterways and their vital importance to our commerce and to the national defense, the above sums are believed to be totally unrealistic and inadequate to do the job that is necessary at this time. The sum allocated to Massachusetts would seem to be entirely out of line with out needs.

As you know, we have a peculiar condition in the port of Boston. We have a 40-foot main channel leading from the open sea; however, the principal tributary channels leading from the main channel to many of the pier areas are only 30 feet or less in depth. These inadequate channels have been allowed to become shoaled and are badly in need of maintenance dredging. The 30-foot-or-less tributary channels mean that it is only possible to dock or undock at the piers at high stages of the tide with modern deep-draft vessels. It means further much costly delay to ship operators due to the high present-day operating cost of modern shipping ($100 per hour), and also the consequent development of an adverse differential in our competitive position with other ports.

The amount of maintenance dredging that is necessary to restore the tributary channels to their authorized project depths is as follows:

Reserved Channel	$135,000
Mystic River (vicinity Chelsea North Branch)	75,000
Weymouth Fore River (27-foot project)	75,000
Narrows Channel	20,000
President Roads anchorage	200,000
Nubble Channel	5,000
Town River (24- and 15-foot projects)	180,000
Fort Point Channel	100,000
Neponset River (Commercial Point to Neponset Bridge)	75,000
Hingham Harbor	35,000

It is understood that only $150,000 has been allocated in the maintenance total for Boston. It is seen, therefore, that an additional $750,000 is required to do the maintenance work of simply restoring our channels to their inadequate authorized depths. Practically no maintenance money has been expended by the Corps of Engineers in the port of Boston for well over 5 years.

In addition to the maintenance work listed above there are also the following new projects that are vital and which have been included in authorization bills:

Extension President Roads anchorage	$1,000,000
Mystic River deepening to 35 feet	3,557,730
Total	4,557,730

The Mystic River deepening from the present 30-foot project to 35 feet is in reality not a new project. It is simply the betterment of an old existing project to meet modern conditions and permit the efficient operation of modern deep draft vessels, including supertankers, at all stages of the tide an at all hours. This project is particularly important due to the amount of tonnage handled on this waterway and also in view of the great extension of the facilities of the Esso refinery, which is the only one in Massachusetts.

The extension of the President Roads anchorage is necessary particularly from the standpoint of national defense in that it will provide adequate anchorage for large naval craft. This was demonstrated as being necessary in the last war. It is also not a new project but is the extension and betterment of an old existing project.

The fact that these projects are not new in the true sense is stressed because it is felt that there is a great difference in bettering an old project as compared with starting construction on a new dam, and so forth.

Another very important project, which has had a favorable report from the Chief of Engineers but which has not as yet been included in an authorization bill, is the deepening of Weymouth Fore River to 35 feet. This project is estimated to cost approximately $9,500,000 and it should be constructed without delay.

Summarizing the status of the improvements necessary as a minimum in the port of Boston at this time when true economy is the watchword, it is believed that every effort should be made to secure an increase in maintenance funds so that Boston can be allocated a total of $900,000 for much needed maintenance dredging and also that sufficient funds, approximately 50 percent of the total in each case should be allocated to initiate the work on the Mystic River deepening and the extension of the President Roads anchorage.

It is requested, respectfully, that you bring these matters to the attention of the proper committee and strongly urge that the amounts appropriated be arranged to carry out the work outlined above.

If you think it advisable I could arrange to bring a delegation from Boston to appear before the subcommittee and present our case. A copy of this letter has been sent to Senator Lodge.

Yours respectfully,

LEONARD B. GALLAGHER,
Colonel USA (ret.), Manager.

TOWN OF CHATHAM, *July 26, 1951.*

Hon. LEVERETT SALTONSTALL,
The Senate Chamber, Washington, D. C.

DEAR SENATOR SALTONSTALL: You are probably familiar with our harbor in the Town of Chatham known as Stage Harbor. However, it might be well to state that this harbor is the most important harbor along the coast of southeastern Massachusetts. The entrance to this harbor and its channel have been maintained by the Federal Government since 1890 when the project was adopted by Congress. This project fixed the depth to be dredged at 6 feet and redredging was done in 1936 and the project alinement was followed as closely as possible. The harbor is now shoaled to 4 feet.

A cooperative study by the United States along the coast lines between Point Gammon and Monomoy was made during World War II to determine the most suitable location for a harbor of refuge, and wherein this harbor has always been a harbor of refuge we feel that it should be maintained as such.

We feel that something should be done to relieve a very dangerous condition which eventually would destroy this harbor of refuge and would also destroy the use of this harbor in event it was needed in the national-defense program.

Mr. Howard Meincke who visited with you while in Washington went over the serious conditions with you that exist there. There has been a break-through at the east end of the harbor and the tide runs only in one direction and that is westerly. This is caused by a drop of the tide between that of the ocean side and that of the bay side. There has been carried into Stage Harbor great quantities of sand that has caused the United States Coast Guard to abandon the use of their boathouse and pier and has closed up over a third of the area of this important harbor. This, I think, was explained to you by Mr. Meincke.

We have taken this matter up with the Corps of Engineers, United States Army, Office of the Division Engineer, at the Army Base, Boston, Mass., and G. W. Carlson, lieutenant colonal, Corps of Engineers, and the Acting Division Engineer conducted an inspection February 28, 1950, and March 1 of the same year, through an engineer by the name of Mr. Regan. His inspection report was made to Washington. However, no complete detailed field survey was made to determine the nature and cost of possible remedial operation. It was scheduled for the earliest date possible. The basis of this survey was to determine what further action would be taken and the last that I knew there were no funds available to the Army Engineers office for this survey at Stage Harbor and future procedure was dependent upon the appropriation of sufficient allotment.

This letter to you is for the sole purpose of finding out what has happened to the project. The situation is dangerous and requires immediate attention. Can you get the Office of the United States Engineers to make a survey of this project and tell us how to remedy the situation and what it will cost? We need this information that we might ask for the funds through Congress and if possible get this project on the appropriations bill which is now in Congress.

Will you please let us know if this is now possible.

Very truly yours,

EDWIN F. ELDREDGE,
Chairman, Board of Selectmen.

STATEMENT OF MICHAEL A. FEIGHAN, MEMBER OF CONGRESS

Mr. CHAIRMAN. The mouth of the Cuyahoga River is in my district and the river runs a crooked course several miles south. I am familiar with the contour of the river and the impediments which prevent long, modern freighters from navigating up the river to the steel and other industrial plants for the purpose of delivering ore and other raw materials so vitally needed for production for national defense. There is nothing that I can add to the statements that have explained, very explicitly, the need, with particular reference to our national defense, of completion of the Cuyahoga River project, as outlined by the previous speakers. In the interest of production for our national defense and future domestic needs, I feel that the appropriation of $13,200,000 is justified, especially so, considering the large amount of money to be contributed by the city of Cleveland and local industries. In addition, the steel companies will make a large capital outlay for construction of new mills.

It is my hope that this committee will act favorably on this appropriation.

Chairman MCKELLAR. That ends the hearings.

(Whereupon, at 6:55 p. m., Monday, July 30, 1951, the hearings were closed.)

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